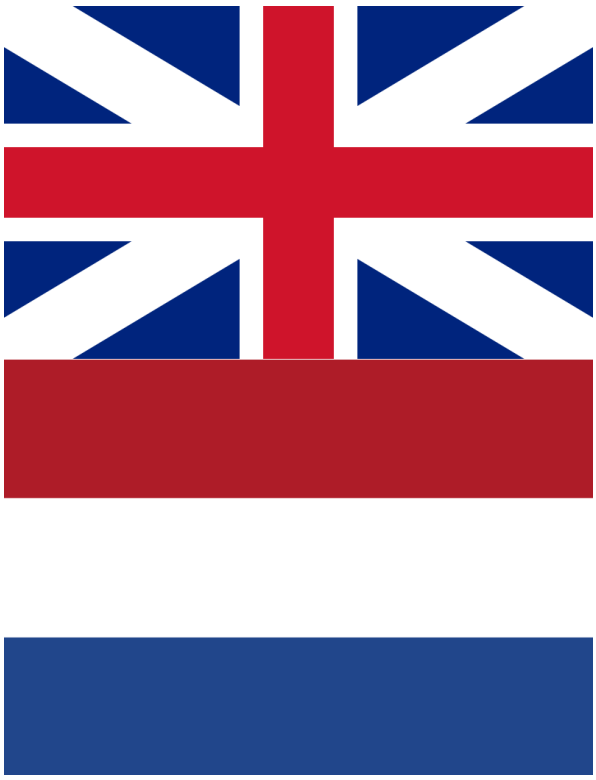
rijksuniversiteit groningen

Students' Motivation in Pre-vocational Secondary Education

A Comparative Study of Mainstream and Bilingual Schools in the Netherlands



Pamela Koert
Wetenschapswinkel Taal, Cultuur en Communicatie
April 2020

Students' Motivation in Pre-vocational Secondary Education: A Comparative Study of Mainstream and Bilingual Schools in the Netherlands.

Pamela Koert

s2017679

MA thesis

Department of Applied Linguistics

Faculty of Arts

Rijksuniversiteit Groningen

dr. Marije Michel

second reader Hilde Hacqueboord

word count : 16498

15 April, 2020

Declaration of Authenticity

MA Applied Linguistics - 2016/2017

MA-thesis

Student name: Pamela C. Koert

Student number: 2017679

PLAGIARISM is the presentation by a student of an assignment or piece of work which has in fact been copied in whole, in part, or in paraphrase from another student's work, or from any other source (e.g. published books or periodicals or material from Internet sites), without due acknowledgement in the text.

TEAMWORK: Students are encouraged to work with each other to develop their generic skills and increase their knowledge and understanding of the curriculum. Such teamwork includes general discussion and sharing of ideas on the curriculum. All written work must however (without specific authorization to the contrary) be done by individual students. Students are neither permitted to copy any part of another student's work nor permitted to allow their own work to be copied by other students.

DECLARATION

- I declare that all work submitted for assessment of this MA-thesis is my own work and does not involve plagiarism or teamwork other than that authorised in the general terms above or that authorised and documented for any particular piece of work.

Signed P.C. Koert

Date 14-04-2020

Acknowledgements

First and foremost, I want to express my gratitude to my resourceful supervisor Marije, for great mentorship and professional guidance and for her insightful comments and expertise that greatly assisted this project.

I would also like to express my sincere gratitude to the students, teachers, and contact persons of the schools who contributed to this research: Stad & Esch & Beroepencollege in Meppel and Scholengemeenschap De Meergronden in Almere. I thank Benjamin Koster, Marije Michel, Eline van Batenburg, and Sharda Ronkes for their assistance in data collection.

Last but not least, I am especially indebted to my family Roel, Hennie, Sith, Alan, and Marcel, who have been supportive of my career goals, made it possible to pursue those goals and above all, are my main reason to stay motivated.

Key words: motivation; Content and Language Integrated Learning (CLIL); L2 Motivational Self System (L2MSS); pre-vocational education.

Abstract

This study was conducted to investigate the motivational differences between students from bilingual and mainstream education. In the Netherlands most students will go to pre-vocational education after they finished their primary education. This group, however, also faces many challenges as they reveal a higher incidence in behavioral issues and are less motivated than students from other educational tracks. Research has shown that the bilingual educational approach Content and Language Integrated Learning (CLIL) has many advantages, one of which being the enhancement of students' motivation. Yet, research focusing on bilingual pre-vocational education is scarce. This study examines the motivational differences between two educational contexts, gender differences, and the motivational behavior across the years. Results showed that students from bilingual education were significantly more motivated than students from mainstream education. Boys from bilingual education were also more motivated than boys from mainstream education, with the exception of their attitude towards foreign languages. Similarly, girls from bilingual education outperformed their peers in mainstream education. However, there was no significant difference found in the influence of societal expectations on motivational behavior, nor the naturalistic learning environment. Also, there is no gender gap found in both educational settings, with one exception in regard of the attitudes toward foreign languages. Girls from bilingual education have a significantly more positive attitude toward foreign languages than the boys in this educational setting. Finally, bilingual students put greater emphasis on studying English as a foreign language because they need it for their future. This is apparent throughout the years. Also, both groups reveal that as they turn older, they put less value on their formal learning environment.

List of Abbreviations and Acronyms

BE	Bilingual education
FL	Foreign language
L1	First language
L2	Second language
L2MSS	Second language Motivational Self System
LL	Language learner
CLIL	Content and Language Integrated Learning
ME	Mainstream education
TTO	Tweetalig Onderwijs (bilingual education)
vmbo	Voorbereidend Middelbaar Beroepsonderwijs (preparatory vocational education)
t-vmbo	Tweetalig Voorbereidend Middelbaar Beroepsonderwijs (bilingual preparatory vocational education)

Table of Contents

Chapter 1: Introduction

There are many factors that influence the process of foreign language (FL) learning, such as age, aptitude, anxiety, and the language learner's (LL's) first language (L1). However, social-psychological motivation is a pivotal determinant for LL processes (Lasagabaster, Doiz, & Sierra, 2014a).

Motivation has been conceptualized in varied ways (Gardner & Lambert, 1959; Gardner & Lambert, 1985; Markus & Nurius, 1986; Higgins 1987; Dörnyei, 2001; Dörnyei & Ushioda, 2011). Research into the impact of motivation on second language (L2)[1] learning originates in Canada, where Gardner and Lambert (1959) discerned that two components, integrative motivation and instrumental motivation, are related to L2 achievement. LLs with integrative motivation have a desire to integrate into the community of the target language; LLs with instrumental motivation are driven by the utilitarian value of mastering the L2 (p.271).

Using the possible selves theory from Markus and Nurius (1986) and Higgins (1987), Dörnyei (2001) suggested a threefold distinction of the conception of language learning motivation: the ideal L2 self, the ought-to L2 self, and the L2 learning experience. These components are assigned to the model known as the L2 motivational self system (L2MSS). This theoretical framework includes the impact of the learning environment by addressing the L2 learning experience. This is an external factor that can influence the LL's motivation by creating opportunities to use the additional languages they have learned (Coyle, Hood, Marsh, 2013). In most cases, this starts in the classroom, and it is therefore important for educators to motivate the students.

Teachers and researchers are trying to understand the construct of motivation in order to enhance teaching and improve research (Lasagabaster, Doiz, & Sierra, 2014). This became particularly clear during the Content and Language Integrated Learning (CLIL) Connect Conference "CLIL & Multilingual Education in the Netherlands and Flanders," which was held in February 2019 at the University of Brussels (Appendix A). The CLIL Connect Conference brings researchers and teachers together to discuss the latest research findings on bilingual education (BE) and to dedicate attention to open questions and unresolved issues in the CLIL method. At the February 2019 conference, there was general consensus among teachers and researchers that CLIL students tend to be more motivated than students from mainstream education (ME). However, the research focuses primarily on BE students

[1] N.B. In the field of Applied Linguistics a distinction is made between L2 and FL, however in this paper both will be used interchangeably to refer to a language that is learned in an educational setting. If, however the situation is different in a particular context, it will be made specific. For more information about this distinction one can consult Coyle, Hood, and Marsh (2013).

from higher levels of education (Mearns, de Graaff, & Coyle, 2017; Sylvén & Thompson, 2015). Therefore, researchers and teachers concluded that future research should include students who are following vocational programs, namely BE preparatory vocational education (*t-vmbo*[2]).

Around the time of the conference, a Dutch secondary education teacher approached the Science Shop of Language, Culture, and Communication at the University of Groningen. The Science Shop is part of the Faculty of Arts. It receives questions from organizations with societal relevance and allows MA and BA students to conduct research projects on these matters. The teacher who approached the Science Shop teaches English to students who follow the preparatory secondary vocational education track (*vmbo*). He wanted to know how teaching methods influence students' motivation for FL learning, if there are motivational differences between boys and girls, and to what extent students' motivation changes over time.

The topics that arose from the CLIL Connect Conference and the Science Shop are the point of departure for this thesis. Given that motivation is one of the main determinants of L2 learning, it is important to determine if there are motivational differences between *t-vmbo* and *vmbo* students. This study seeks to address the gap by not only examining these differences, but also the differences between boys and girls in the aforementioned teaching approaches over the course of three years.

This introductory chapter first provides context by elaborating on the educational system in the Netherlands and the implementation of BE in Dutch schools. Next, a brief overview of the rest of the thesis is provided.

1.1. Educational System

This section consists of two parts that describe the Dutch school system in greater detail. The first section, Section 1.1.1., explains the structure of the Dutch school system, with a focus on the Dutch track system. The second section, Section 1.1.2., elaborates on BE, with a focus on CLIL, which is predominate in the Dutch school system. Empirical findings regarding this approach are presented in more detail in Chapter 2.

1.1.1. The educational system of the Netherlands.

The Dutch school system consists of three general levels: primary education (*basisonderwijs*), secondary education (*voortgezet onderwijs*), and tertiary education (*hoger onderwijs*). Secondary education in the Netherlands is characterized by its track system. After students have completed primary education, usually at the age of twelve, they are transferred to one of the four secondary educational tracks: practical education (*praktijkonderwijs*), preparatory vocational education (*vmbo*), senior general education (*havo*), or university preparatory education (*vwo*). These tracks vary in content, and each student's level of competence determines their track. Competence is assessed through a standardized

[2] With *t-vmbo*, the 't' stands for bilingual (*tweetalig*).

aptitude test[3], which is provided in the final year of primary school. The educator's recommendation and the pupil's and parents' preferences also influence the type of secondary education each pupil receives (Ministerie van het Onderwijs, Cultuur en Wetenschap, 2019, p.61). Approximately 5% of pupils attend *praktijkonderwijs* after they have finished their primary education, while 36% attend *vmbo*, 29% attend *havo*, and 30% attend *vwo* (CBS, 2019).

1.1.1.2. Preparatory vocational education.

Not only does the largest group of students attend *vmbo*, but this four-year vocationally orientated stream is also the most diverse stream because it offers four separate learning pathways: basis vocational program (*vmbo-basis*), advanced vocational program (*vmbo-kader*), combined program (*vmbo-gl*), and theoretical program (*vmbo-tl*). By the end of their second-year, students are assigned to one of these four pathways. *vmbo-basis* is the most practical, while *vmbo-tl* is considered the most advanced stream, focusing on the theoretical side of prevocational education. Henceforth, *vmbo* is used in this thesis to refer to *vmbo-tl* as this will be the target group of this study. This group is also expected to specify their profile at the end of their second year. There are four options: care and welfare; engineering and technology; business; agriculture (Rijksoverheid, 2019a).

Students from *vmbo* display a higher incidence of behavioral problems that affect learning behavior, motivation, and academic performance. Students from *vmbo* also score higher than *vwo* students in emotional illnesses, such as anxiety and mood disorders (Stevens et al., 2018). Additionally, other behavioral issues, such as aggressive behavior and hyperactivity, occur more frequently at *vmbo.* These factors interfere with students' academic performance and may lead to lower grades. Consequently, reduced self-confidence and fear of failure negatively affects these students' motivation (Ministerie van Onderwijs, Cultuur and Wetenschap, 2019, p.104). Other characteristics associated with *vmbo* students are being socioeconomically disadvantaged, having less motivation, and dropping out more frequently than students from other educational tracks (Coyle, Hood, & Marsh, 2013; Stevens et al., 2018; Ministerie van Onderwijs, Cultuur, en Wetenschap, 2019). The role of motivation in language learning is discussed in more detail in Chapter 2, Section 2.1.

1.1.2. Bilingual education in the Netherlands.

Bilingual education in the Netherlands is centered on the use of FLs as mediums of instruction. In Europe, a dual-focused methodology referred to as CLIL[4] has been rising in popularity for the last decade (Dalton-Puffer, 2007). This type of instruction encourages students to learn a subject through a language other than their L1, which means the content is transmitted in a FL, which provides them the opportunity to improve their FL skills whilst simultaneously developing other knowledge (p.3). In the

[3] In the Netherlands there are five types of tests that are often used to assess the pupil's aptitude: Centrale Eindtoets, Route 8, IEP eindtoets, Dia-eindtoets, or AMN Eindtoets (Rijksoverheid, 2019b).
[4] The term CLIL is mostly used in a European setting but in other countries it is also has been named differently (Coyle, Hood, & Marsh, 2013; Doiz, Lasagbaster, Sierra, 2014b).

Netherlands, this method is also known as *tweetalig onderwijs* (TTO), and English is often chosen as the FL[5]. The terms "CLIL" and "TTO" are sometimes used interchangeably; however, CLIL is a method that can be used when a school decides to implement TTO[6].

There are currently 130 schools that offer TTO to their students: 125 *vwo,* 72 *havo*, and 31 *vmbo* (Nuffic, 2019a). While bilingual *vmbo* is still in its early development, an increasing number of Dutch schools acknowledge the advantages that come with the CLIL method (Tanner & de Graaff, 2011). In the Netherlands, the organization Nuffic is responsible for the internationalization of education, and they monitor TTO schools. Before a school is registered as a TTO school, there are a few guidelines it must follow to meet the quality standards. For example, Nuffic (2019b) states that each year, ranging from year one to year four, 30% of the courses must be provided in the target language and that, at the end of their academic career, students should arrive at B1/A2 level, which is a language-level classification determined by the Common European Framework of Reference (CEFR)[7]. The teachers are expected to be at B2 level, and there should be at least one native speaker who teaches a course. Another prerequisite emphasizes that the students should take part in international activities[8] that foster their intercultural competence (Nuffic, 2019b). More information about the practical implications of CLIL is provided in Chapter 2, Section 2.2.

1.2. Thesis Structure

This study addresses the motivational differences between two educational settings: *t-vmbo* and *vmbo*. Gender-related differences and L2 motivation evolvement across three year-groups are also examined. In Chapter 2, information about the most relevant and important constructs is provided. After each concept is defined and discussed, findings from studies related to the concept are presented. In Chapter 3, the methodological approach of this study is explained. Ethical considerations, materials, procedures, and analysis methods are provided. Next, key findings are presented in Chapter 4. This is followed in Chapter 5 by interpretation and discussion of the findings in light of previous research. In the final chapter, the findings are summarized, and limitations of this study and further recommendations are presented.

Chapter 2: Theoretical background

There are numerous variables that affect motivation from within and from without the LL. While the former includes the willingness to learn an L2, gender, and age, the latter includes the learning environment, the type of exposure, and parental encouragement. This section elaborates on these

[5] On the Dutch eastern border schools also offer German as a medium of instruction.
[6] Some schools also offer Fast Lane English (*Versterkt Engels*) which is an optional program outside of the regular curriculum and merely focuses on the language itself.
[7] For more information about the CEFR the following source can be consulted: Council of Europe (2001).
[8] These type of activities could be an internship abroad, a student exchange program, or an international project. The following platforms provide more information about international projects: eTwinning, iEarn, ePals, and Learning Circles (Nuffic, 2019b).

interactive variables by first operationalizing the construct of motivation in Section 2.1. The theoretical framework of Dörnyei (2001) is explained, followed by research that used this framework to analyze gender and age-related differences in L2 motivation. Section 2.2. presents previously conducted research after elaborating on BE approach CLIL. Section 2.3. focuses on *vmbo*, especially *t-vmbo*.

2.1. Motivation

Motivation plays a pivotal role in L2 learning, as it is directly linked to LLs' competence (Dörnyei, 2001). This section first addresses the development of motivation theories that contribute to the theoretical framework used in this thesis. Then, research on motivational differences in an educational context is presented.

2.1.1. The second language motivational self system.

The L2MSS is a theoretical framework that supports the most recent L2 motivational theories. Nowadays, a sociodynamic perspective is more commonly applied in L2 motivation research. However, motivation research has its origins in the field of social psychology (Dörnyei & Ushioda, 2011). The pioneers of L2 motivation research were Gardner and Lambert (1959; 1985), who assert there are two underlying concepts influencing motivation: motivation can be integrative, which is socially or culturally driven, or instrumental, which stems from the utilitarian value and reflects more pragmatic goals. For example, if a student wants to learn the English language because they are going to a country where English is the target language, it means that they have integrative motives. A student is instrumentally motivated if they are learning English in order to pass an exam.

Psychological research also assesses motivation by looking at individuals and their aspirations for the future (Markus & Nurius, 1986; Higgins, 1987). Markus and Nurius (1986), who coined the term "possible selves," primarily focused on future-self representations of people, which serve as a motivational drive to either avoid or aspire to a certain condition in the future. Higgins (1987) developed a more precise tripartite model containing the actual, ideal, and ought selves, which are used to predict the occurrence of negative emotions. These domains belong to the self-discrepancy theory and include the representation of an individual's current attributes (actual), the representation of what an individual aspires to become or possess (ideal), and the representation of the attributes an individual believes they should have (Higgins, 1987, p.320). Notably, these three elements are also influenced by societal features, as others assign, aspire, or expect specific attributes from an individual. Negative emotions, such as low self-esteem, can occur if there is a discrepancy between the actual self and the ideal self. Similarly, if another person has other wishes for an individual (ideal), the individual who does not meet those standards (actual) could feel shame from disappointing the other person. People may be motivated by their discomfort to avoid this type of discrepancy. The degree to which a person is motivated depends on how significant the discrepancy is between the possible selves and the aspirations of others (p.322).

These elements were unified by Dörnyei (2001), who assigned them to his L2MSS. This framework has been widely adopted by researchers looking at the L2 motivation of LLs. L2MSS consists of three constructs. First, there is the ideal L2 self, which is related to Gardner and Lambert's (1985) integrative motivation as it explains L2 aspirations. For example, an LL may wish to be able to communicate in their L2 when they go on holiday. Second, the Ought to L2 Self corresponds with the other and ought self from Higgins (1987) and the instrumentality from Gardner (1985). This self is focused on obligations, which are affected by the outside environment and connected to the avoidance of possible negative outcomes. For example, an LL may be motivated to study for a test to avoid disappointing their parents or friends. Third, the L2 learning experience is the environment in which the L2 is acquired. This is usually the classroom for language students, but an LL's motivation can also be influenced by their contact with the L2 community (Dörnyei, 2011).

Alongside the L2MSS, there is another current strand that is important to consider in the field of applied linguistics: the dynamic systems theory (DST). Simply stated, this approach considers the interplay of multiple factors. A direct causal relationship is not always occurrent, as other factors can affect the direction of development. For example, it is not possible to state that people who are intelligent will excel in language learning. There are several conditions that influence the development of a target language. These conditions can be internal and external. Internal sources are connected with the characteristics of the LL, for example, age and motivation; external sources are linked with the LL's environment, for example, parental encouragement and teaching method. De Bot, Lowie, and Verspoor (2007) state that these conditions are interlinked and can cause a change within the system. From their view, many factors should be considered when examining the L2 process (p.19).

2.1.2. Research on motivational differences in mainstream education.

Research reveals that these components affect L2 motivation in different ways depending on the LL's gender and age (Kormos and Csizér, 2008; Azarnoosh & Birjandi, 2012; Henry & Cliffordson, 2013; Iwaniec, 2019). Research on gender differences and language acquisition demonstrates that female LLs are usually more motivated than male LLs (Gardner & Lambert, 1985). However, small discrepancies have been detected, as some studies stress that male and female students have different reasons to study an L2 and that the design of the curriculum contributes to L2 motivation (Azarnoosh & Birjandi, 2012). Azarnoosh and Birjandi (2012) investigated these motivational differences in Iranian high school students and found that female students display a higher-level ideal L2 self, while male students outperform the girls when it comes to the Ought to L2 self. Azarnoosh and Birjandi (2012) say that families especially affect the motivational current of Iranian boys because boys are expected to be responsible for their families when they grow up.

Other researchers, such as Henry and Cliffordson (2013), argue that L2 motivation is culturally dependent and that "gender roles and occupations are less rigid in Sweden, and young women and men grow up with broadly similar expectations and aspirations for their futures" (p.277). Their findings

demonstrate that there are no motivational differences in the ideal L2 self of Swedish boys and girls, but significant differences occur for L2s other than English. Iwaniec's (2019) findings corroborate Henry and Cliffordson's view on cultural significance, as she found that in Poland, where gender inequality prevails, females tend to have more integrative motivation than males. Another reason for this gender difference could be the fact that participants in Iwaniec's research came from rural areas, which means that they have less direct contact with their L2. Henry and Cliffordson (2013) and Iwaniec (2019) therefore suggest that future research take into consideration the frequency of contact with the English language.

The third component of the L2MSS framework, the L2 learning experience, is related to the learning context. As mentioned in the introduction, the classroom is often the environment in which students learn a L2, so the students' motivation is usually influenced by task designs, L2 teachers, and curriculum (Azarnoosh & Birjandi, 2012, p.579). In comparison with Azarnoosh and Birjandi (2012), Henry and Cliffordson (2013), and Iwaniec (2019), Henry (2014) investigated this construct in more detail and found that female Swedish students believe that they learn most of their L2 in a classroom setting, whereas male students believe that they are more likely to learn the L2 outside the educational setting. These findings suggest that naturalistic learning environments encourage male students more than the classroom setting.

However, gender is not the only variable that seems to affect LLs' commitment, as age is also a determinant factor influencing the L2 learning experience. Kormos and Csizér (2008) analyzed students from secondary education (age: *M*=16.5), university (age: *M*=21.5), and adult language learning (age: *M*=33.7). In their study, they looked at three factors: ideal L2 self, ought-to L2 self, and international posture, which is based on the LL's interest in international affairs. The two older groups demonstrated significantly higher levels of motivated learning behavior than the younger group. The strongest predictor for the younger students was related to the LL's immediate learning environment, the classroom experience, and their teacher, while older students were less affected by this.

In conclusion, the findings of Kormos and Csizér (2008), Azarnoosh and Birjandi (2012) Henry and Cliffordson (2013), and Iwaniec (2019) reveal conflict regarding LLs' motivation. Their research demonstrates that there can be differences in L2 motivation depending on gender, age, and the L2 learning environment.

2.2. Content and Language Integrated Learning

As previously highlighted, CLIL is a dual-focused methodology in which subjects are taught through an FL. This FL can be a dominating language in one's country, like the French language in Canada, or a global language, like English. This is one of the many factors that influences CLIL curriculum. CLIL programs vary across contexts, as each school policy, each government, and each educational level has different regulations (Coyle, 2007). However, CLIL does seem to change the motivational behavior of students regardless of these factors. CLIL students are more motivated to master a L2 when compared to students from ME (Baker and MacIntyre, 2003; Sieben and van

Ginderen 2014; Heras and Lasagabaster , 2014a; Sylvén, & Thompson, 2015; Mearns & de Graaf, 2017). The main characteristics of and research on this teaching method are explained in more detail below.

The term CLIL was coined by David Marsh in 1994. He based this concept on two programs that arose in the 1970s: the Canadian model of French immersion and the British language across the curriculum (LAC) program (Coyle, Hood, & Marsh, 2013). While the former primarily focused on exposure to the L2 (French), the latter also considered the students' L1 and emphasized language learning in each subject across the curriculum. Similarly to these immersion programs, CLIL offers a significant amount of FL exposure. The late partial immersion programs, where exposure to an FL starts at the secondary school level, can be compared with CLIL methodology, as equal attention is paid to both content and language (Cummins, 1998). Students from early full immersion programs primarily develop their receptive knowledge, listening, and reading skills (p.35). However, it should be noted that productive skills like speaking and writing also benefit FL development. BE students should also be encouraged to have meaningful interactions in the FL and to focus on L2 linguistic forms (Cummins, 1998; Llinares, Morton, Whittaker, 2012). The former is known as meaning-focused instruction, and the latter is known as form-focused instruction. Both types of instruction enhance students' awareness of the FL. Raising the students' language awareness can be done both in language classes and in subject classes, which deepens the students' understanding of the given subject. This echoes the main principles of the LAC approach, which encourages every teacher to be a language teacher (Coyle, Hood, & Marsh, 2013).

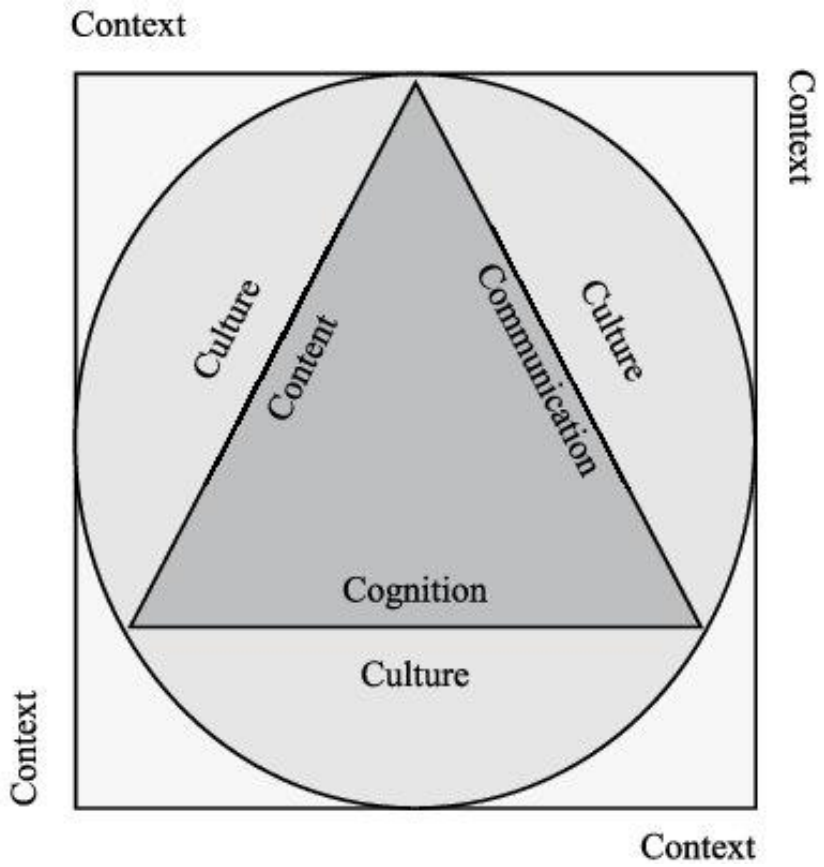
As mentioned before, the application of a CLIL program varies across contexts. Nevertheless, the conceptual framework developed by Coyle in 1999 provides a holistic perspective on the necessary balance between language and content in a CLIL program (Coyle, 2007). This notion is visualized in the 4Cs framework. According to Coyle (2007), this framework serves as a tool to encourage effective learning and teaching, as it unites different learning and language theories but also emphasizes the importance of intercultural awareness (p.556). The fundamental components of this framework are content (development of skills and knowledge), communication (using a FL), cognition (thinking and learning processes), and culture (raising awareness about cultures and global citizenship). These components are interrelated and embedded in a specific CLIL context as seen in Figure 1.

Culture is at the core of this framework, both the culture of the target language and the culture of the subject. For example, an art teacher can add a cultural activity to the lesson plan that emphasizes the differences between the Romantic landscape paintings of the United States and England. This demands higher thinking skills. The characteristics of both examples need to be known and compared, and the students need the L2 to communicate their thoughts. However, Sylvén (2017) also notes that when English is the target language, which is the case in Dutch CLIL programs, culture is usually not part of the program because English is omnipresent (p. 61). Nevertheless, the components of this framework

are encouraged if a teacher is teaching in a CLIL school. The aim of this framework is to enable teachers to connect the different elements of CLIL in their lesson.

Figure 1

The conceptualization of CLIL through the 4C's framework (Coyle, Hood, & Marsh, 2013, p.41).



2.2.1. Research on bilingual education.

CLIL has received much attention in recent years. Especially in terms of motivation, many researchers have reported the positive effects of BE (Baker and MacIntyre, 2000; Sieben and van Ginderen 2014; Heras and Lasagabaster , 2014a; Sylvén, & Thompson, 2015; Mearns & de Graaf, 2017). Teachers have also experimented with the method. For example, Banega (2013) reports on the motivational changes of teachers and students at a school in Argentina. They implemented the CLIL pedagogy in order to improve not only the students' motivation, but also their own. They monitored their own behavior and the behavior of the students, incorporated authentic materials, developed activities that started with awareness-raising, and used think-pair-share[9] activities to encourage output production. They found that both teachers and students became more enthusiastic about their subject. The students were more engaged, participated more in class discussions, and proved to be more motivated (p. 92).

Baker and MacIntyre (2000) compared the motivation of students from ME and BE. They monitored the motivational behavior of both non-immersion and immersion students. The results reveal

[9] These type of activities encourage L2 output production as students are first given the opportunity to think about possible answers or solutions, then they are expected to share it with their peers, and in the final stage of this activity they share their findings with the rest of the class.

that immersion students, in comparison with non-immersion students, have less favorable attitudes and are scarcely motivated toward learning French. In particular, the non-immersion male students scored significantly lower. The findings of Heras and Lasagabaster (2014a) also demonstrate that female students from BE and ME have higher levels of motivation when it comes to ideal L2 self than male students, as well as a more positive attitude toward the L2 community. However, this was only statistically significant between the students from non-CLIL groups. For the CLIL group, they found that the gender difference is significant for the Ought to Self, in which the males are more motivated than the females. These findings corroborate the results of Azarnoosh and Birjandi (2012) and Iwaniec (2019), who looked at the motivational differences of students in ME[10].

As pointed out in Section 2.1., motivation is not a static notion that remains unchangeable throughout time. There are many factors, such as gender differences and teaching methods, that affect LLs' attitudes and motivation. Taking the dynamic systems approach into consideration, there is an interplay between these factors, and studies have found evidence that demonstrates motivated behavior can change across timescales. Doiz, Lasababaster, and Sierra (2014a), for example, discovered that the type of motivation that drives students to master a FL varies over the years and depends on the age group. Younger CLIL students are more intrinsically motivated, focused on personal goals, while older students are more instrumentally orientated, focused on the future and the possible positive outcomes of mastering an L2. Third-year students also seem to be more interested in other cultures and FL's after they have been exposed to BE for a greater amount of time.

Sylvén and Thompson (2015) compared CLIL students to non-CLIL students at a high school in Sweden over the course of three school years and evaluated the students' motivation at the beginning and at the end of the CLIL program. Their findings reveal that CLIL students have a more positive attitude toward the target language when they start the program, which means that previous findings about CLIL students could be explained by the inherent character of CLIL students (p.40). Similar conclusions are drawn by Mearns, de Graaff, and Coyle (2017), who found that CLIL students are most motivated during the first-year of the CLIL program. Whereas the previously mentioned researchers used questionnaires with Likert-scales to investigate L2 selves, Doiz, Lasagbaster and Sierra (2014b) were particularly interested in how the students gained or lost motivation, and they investigated the processes by providing the students with open-ended questions. They asked the students to comment on the advantages and disadvantages of the CLIL program. Students were also required to make additional comments on the courses that were taught in English. Again, two groups were compared, first- and third-year students, and the findings reveal that students' interest alters over time. Younger students appreciate the varied CLIL activities, while third-year students feel that those activities are repetitious and prefer to work in projects with computers (p.132).

Sieben and van Ginderen (2014) suggest that students from higher social backgrounds have a greater tendency to follow the bilingual track, whereas students from lower social backgrounds do not.

[10] See for more Information Section 2.1.2: Research on motivational differences in mainstream education.

However, as mentioned in Chapter 1, *vmbo* also offers BE, and this educational track contains a higher percentage of students with a disadvantageous socioeconomic background (Ministerie van het Onderwijs, Cultuur en Wetenschap, 2019, p.90). This is explained in more detail in the section below.

2.2.2. Research on bilingual education in *t-vmbo*

As mentioned in Chapter 1, most Dutch children enroll in *vmbo* after they finish their primary education. *vmbo* students are a very diverse group that faces some challenges (Tanner & de Graaff, 2011; Denman, Tanner, de Graaff, 2013). These students have a higher incidence of behavioral problems, come from lower socioeconomic backgrounds, are less motivated than *havo* and *vwo* students, and have a higher dropout rate (Denman, Tanner, de Graaff, 2013; Ministerie van Onderwijs, Cultuur, en Wetenschap, 2019; Stevens et al., 2018). Research in the previous chapter demonstrates that the CLIL method can affect students' motivation positively. However, the research presented does not include less academic or at-risk students. There is little research on CLIL's effects in *t-vmbo*, as it is still in early in its development. This section includes research done in this setting and draws parallels to research conducted in similar contexts.

Language is a key component in a CLIL classroom; however, the language used to teach the students is sometimes not their L2. In the Netherlands, there used to be a higher percentage of ethnic minority students enrolling in *vmbo* (Ministerie van het Onderwijs, Cultuur en Wetenschap, 2019). Those numbers have dropped as more students from different ethnic backgrounds have dispersed amongst the educational tracks. However, these multilingual students are more likely to repeat a year of school. This year is sometimes used to enhance their language skills, depending on the school's policy (Ministerie van het Onderwijs, Cultuur en Wetenschap, 2019, p.96). Lasagbaster (2008) points out that CLIL students who are learning a third language in a CLIL program usually outperform students who are enrolled in ME. Lasagbaster investigated content learning through an FL (English) in the Basque Country, where Spanish and Basque are considered the two official languages. The results reveal that CLIL students benefit from CLIL methods and improve their language competence. However, the results also demonstrate that gender differences are occurrent in grammar, listening, and writing skills. The only competence where male students are not outperformed by the female students is output production. For this component, no gender differences are seen. In addition, research done by Genesee (2007) reveals that problems in students' L1 do not become problematic when they are taught in an immersion setting.

Data also reveals that lower socioeconomic status is often associated with *vmbo* students (Ministerie van het Onderwijs, Cultuur en Wetenschap, 2019, p.90). The behavioral problems, multilingual backgrounds, and lower socioeconomic status of these students combined make them an at-risk group. Genesee (2007) analyzed at-risk students in a French immersion setting. He discovered that students with a lower socioeconomic status still benefit from BE. Their L1 and L2 are not negatively affected, and exposure to an L2 leads to higher proficiency scores (Genesee, 2007). For the educational

track *vmbo*, this indicates that language development will not be hampered.

Another key component of CLIL that is considered highly important is intercultural awareness. As mentioned in Chapter 1, CLIL programs require students to engage in international projects because this facilitates the students' pluricultural comprehension and their use of the L2 (Coyle, Hood, & Marsh, 2013). Researchers Tanner and de Graaff (2011) analyzed the effect of internationalization activities on *t-vmbo* students. They assessed valuable CLIL implementation in *t-vmbo* by looking at interviews, L2 studies related to *t-vmbo*, and online surveys given to teachers and students. They discovered that, because the CLIL method creates a natural learning environment, *t-vmbo* students are more motivated to learn a FL. CLIL students are educated through exchange excursions and contact with native speakers of a specific target language instead of through grammar rules and vocabulary lists. These interactive internationalization activities create a meaningful communicative learning environment, emphasize the FL's relevancy, and facilitate active engagement (Coyle, Hood, & Marsh, 2010). According to Tanner and de Graaff (2011), this affects *t-vmbo* students' motivation positively as they found that *t-vmbo* students are more aware of English's status as a global language and of English's potential use in their future aspirations. This potential is the main reason why *vmbo* schools started to implement CLIL, as most vocational jobs require some knowledge of the English language (e.g., reading machine instructions) (p.19).

These findings concur with the results of Denman, Tanner, and de Graaff (2013) who also analyzed teachers' and students' experiences of Dutch *t-vmbo* schools. They conclude that *t-vmbo* has many advantages, such as "the preparation of students for their future careers and cross-cultural communication with other English language users," in addition to an increase in motivation (p.298). Both students and teachers respond positively to the effects of BE, and over 70% of the students in this study would encourage other students to join the bilingual program.

All in all, *t-vmbo* students are an at-risk group because they have more behavioral problems, come from lower socioeconomic backgrounds, are sometimes multilingual, and are less motivated than students from other educational tracks. Research, however, indicates that these factors do not play a negative role in students' academic achievement in a bilingual setting. The CLIL method seems to have a positive effect, as it increases their motivation to learn an additional language.

2.3. Research questions

Several studies have examined motivational differences, with some focusing on gender and age and others on the learning environment (e.g., Kormos & Csizér, 2008; Azarnoosh & Birjandi, 2012; Henry and Cliffordson (2013); Iwaniec, 2019). Research reveals conflicting findings about gender differences in L2 motivation, but there is a general tendency that suggests there is a gender gap. Researchers such as Kormos and Csizér (2008) suggest that the learning environment could narrow this gap. The dual-focused approach CLIL seems not only to diminish these differences, but also to cause improvements on several levels. However, differences between older and younger learners are still apparent in this type of learning environment (Doiz, Lasababaster, & Sierra, 2014a; Sylvén &

Thompson, 2015; de Graaff & Do Coyle, 2017). CLIL is advantageous because students become more internationally oriented, improve their attitude toward FLs, and become more motivated (e.g., Doiz, Lasababaster, & Sierra, 2014a; Sylvén & Thompson 2015). However, only a few works in the literature include students who are less academic or at-risk (Denman, Tanner, & de Graaff, 2013). To fill this literature gap, this thesis focuses on the L2 motivation of *vmbo* students in a bilingual setting (*t-vmbo*). The following research questions are considered in this study:

1) Are there differences in motivation for learning English between *t-vmbo* and *vmbo* students?
2) Are there gender-related differences?
3) To what extent do motivational differences between *t-vmbo* and *vmbo* learners change across year-groups?

Chapter 3: Method

This chapter will describe the method that was used to investigate the research questions. The first variable (independent) that will be considered are the participants from mainstream- and bilingual education. Then, the dependent variable, attitudinal and motivational factors, will be addressed. The questionnaire that was created to test the students' motivation was piloted before it was used in the main study and will be presented as such.

3.1. Participants

In total, 133 students from two Dutch schools participated in the current study. Of those students, 63 came from bilingual education (*t-vmbo*) and 70 students from mainstream education (*vmbo*). All the students were enrolled for the same stream: preparatory-vocational secondary education (*vmbo-tl)*. While this school stream usually lasts four years, this study looked at the first three years[11] as bilingual education is not offered in the final year. The students were between 11 and 16 years old. More details are provided in the Table 1 below.

Table 1

Summary of participants per year-group and gender from bilingual and mainstream education

	T-VMBO				***VMBO***			
Year	1	2	3	**Total**	1	2	3	**Total**
Boys	12	11	12	35	14	8	19	41
Girls	13	7	8	28	6	13	10	29
Total	**25**	**18**	**20**	**63**	**20**	**21**	**29**	**70**

[11] This corresponds with the ninth (freshman), tenth (sophomore), and tenth (junior) grade.

3.1.1. Ethical considerations

Because the students that participated in this study were minors, their parents were asked to sign a consent form, see Appendix B. Before the questionnaire was given to students, they were asked again if they wanted to participate, if not, they were free to leave the room. The students were also told they could withdraw at any time during the examination and they were assured that their answers remained anonymous and confidential.

3.2. Materials

In order to address the research questions regarding the students' motivation, an questionnaire was utilized, which was based on the L2MSS framework (Appendix C). The questions were built upon earlier work by Mearns and de Graaff, 2018; Elzenga and de Graaff, 2015; and Mearns and de Jong (in preparation) and was based on the theoretical framework L2MSS. The questions targeted the following constructs: *Ideal L2 Self, Ought-to L2 Self,* and *L2 learning Experience*. The following section will first address the pilot phase, then the research method that was used to generate data is explained in more detail.

3.2.1. Pilot

The original questionnaire consisted of 67 questions and were divided among seven scales: *Attitude to English*, *Attitude to Foreign Languages*, *Future-Self*, *Ought-to-Self*, *L2 Learning Experience*, *Extramural*, and *L2-Confidence*. All questions were presented in Dutch. In order to measure the reliability of the questionnaire and to improve the content, the questionnaire was first administered to 15 ME students (ten boys, five girls) during the pilot phase.

The questionnaire was piloted at a mainstream school. The students were encouraged to comment on the survey's questions when a question was formulated in a unclear manner or if they did not comprehend what was asked from them. This was done because the questionnaire was based on materials from studies which were aimed at students from higher educational levels (Elzenga & de Graaff, 2015; Mearns & de Graaff, 2018; Mearns and de Jong (in preparation)). This will be explained in more detail below in the section 3.2.2: Main study. The students could choose between five possible answers for every question. The multiple-choice options included: strongly agree, agree, neutral disagree, and strongly disagree (5-point Likert scale).

After excluding one of the boy students, who selected several answers for almost every question, all the items were examined for internal consistency, using Cronbach's psych::alpha. The correlations between the items showed a high internal consistency, with the exception of the construct *L2-Confidence*, which originally consisted of six items. Removing the items from this construct resulted in a construct which only consisted of three items, while the other constructs consisted of 5 or more.

Therefore, *L2 Confidence* was excluded from further analysis. The six scales that remained and were used in the main study were related to aspects of Ideal-Self (1, 2 & 3), Ought-to-Self (4) and to aspects of L2 Learning experience (5&6). This is visualized in Table 2 below.

3.2.2. The main study: questionnaire

As mentioned above, the questionnaire for the main study was altered after processing the students' input. The instrument that was used for the main study consisted of six scales and were theoretically grounded in the L2MSS framework (Appendix D). Each scale that was selected for the current study was adapted from previous studies (Elzenga & de Graaff, 2015; Mearns & de Graaff, 2018; Mearns and de Jong (in preparation)) as can be seen below in Table 2. With the exception of Means & de Graaff (2018), questions were provided in Dutch. Therefore, the questions from Mearns and de Graaff's (2018) study were translated by the researcher.

Table 2

Descriptions and origins of the L2MSS scales used in the main study.

L2MSS	Scale	Based largely on items from:	Description
Ideal L2 Self	**Attitude to English**	Elzenga and de Graaff (2015) ; Mearns and de Graaff (2018)	This scale was directed at the students' attitude to English (e.g. I find it interesting to learn English).
Ideal L2 Self	**Attitude to Foreign Languages**	Mearns and de Graaff (2018).	This scale tested the students' attitude to foreign languages (e.g. I find languages useful).
Ideal L2 Self	**Future L2 Self**	Elzenga and de Graaff (2015); Mearns and de Jong (in preparation).	This scale is used to administer the students' perspective on how English could be useful or necessary for their future (e.g. I can imagine that I need English for my education after high school).
Ought-to L2 Self	**Ought-to L2 Self**	Elzenga and de Graaff (2015) ; Mearns and de Graaff (2018)	The items from this scale targets the role of parents and friends on the students' L2 motivation. (e.g. I need to do well in English because my parents find it important).
L2 Learning experience	**English Lesson**	Elzenga and de Graaff (2015); Mearns and de Jong (in preparation).	This scale was used to assess the students' perspective on how English (L2) was taught in the classroom (e.g. My English teacher makes learning English fun).
L2 Learning experience	**Extramural**	Mearns and de Graaf (2015)	This scale tested the students' L2 learning experience outside the classroom (e.g. I play games in English (Fortnite, Krunker).

In total, after the piloting the questionnaire, 40 items remained suitable for the main study. Each question had 5 closed-ended questions. The multiple-choice options included: strongly agree, agree, neutral disagree, and strongly disagree (5-point Likert scale). The questions for each scale were randomized (Appendix D).

After the main study was conducted at both schools, all the constructs of the questionnaire were tested for internal consistency, using Cronbach's psych::alpha. All subscales were internally consistent, with the exception of the construct *Attitude to Foreign Languages*. During the pilot phase the category *Attitude to Foreign Languages* was ά .83 internally consistent, however, the main study revealed that the internal consistency dropped to ά .51. Hence, Q7 ("I find languages difficult") was dropped from further analysis in order to increase the internal consistency of this construct to .64. Meaning, 39 items

remained appropriate for further analyses. With the exception of construct two, the other five constructs had a Cronbach's alpha score of 0.82 or higher (Appendix D). As already mentioned in 3.1, the participants of this study are Dutch. The Dutch version is therefore also included in the Appendices (Appendix E).

Next to internal consistency, normal distribution was also tested for each group through the Shapiro-Wilk (SW) test. As can been seen in the table below all the Shapiro Wilks tests revealed to be non-significant, hence normality can be assumed for all six variables. Also, a Levene's test revealed that it was non-significant, suggesting that there is an equality of variance $F(11,121) = .74$, $p = .69$. This means that there is no violation of the set out assumptions for homogeneity of variance and normal distribution and therefore ANOVA was used to continue the analysis, see section below.

Table 3.

The results of the statistical analysis revealing normal distribution across year groups.

		Bilingual Education (tmvbo)	**Mainstream Education (*vmbo*)**
Construct	**Year**	**Shapiro-Wilk statistics**	**Shapiro-Wilk statistics**
1. Attitude to English	1	0.95	0.90
	2	0.92	0.93
	3	0.97	0.96
2. Attitude to Foreign Languages	1	0.88	0.96
	2	0.88	0.95
	3	0.93	0.93
3. Future Self	1	0.92	0.95
	2	0.95	0.87
	3	0.97	0.93
4. Ought to Self	1	0.89	0.97
	2	0.89	0.94
	3	0.96	0.93
5. English Lesson	1	0.94	0.96
	2	0.85	0.96
	3	0.96	0.97
6. Extramural	1	0.95	0.98
	2	0.93	0.93
	3	0.98	0.89

For the second part of the questionnaire, students were asked to answer open-ended questions about their attitude toward English, their language background, and gender. These questions were primarily based on a study conducted by Doiz, Lasagbaster, and Sierra (2014b). This was done to gain more insight and allowed the respondents to express and elaborate their opinions about the L2 (Appendix C).

3.3. Procedures

This questionnaire was given to two schools. At the first school, the examiner personally delivered the instructions to the mainstream students. Before the questionnaire was distributed, students were asked to hand-in their consent form and the students were assured that if they decided that they did not want to participate during the survey that they were allowed to do so. Also, students were assured that their identity remained anonymous. Then the examiner stated the purpose, the content, and the duration of the survey and explained what was expected from the students by presenting the example question on the first page of the questionnaire. After this explanation, students could turn the page and start answering the 40 questions.

After the questionnaire was given to the mainstream school, the questionnaire was personally delivered to the bilingual school, where the teacher distributed the questionnaire among the students. The examiner provided explicit instructions and told the teacher what she could expect during the examination. At both schools, the students needed approximately ten to fifteen minutes to finish the questionnaire.

There were a few students who scored below or above average, creating outliers in the visual representation of the data. These outliers were carefully examined by the researcher and it revealed that these outliers were created for different constructs. Meaning, that there were several participants more or less motivated for different constructs. For example, participant number 13 was extremely motivated for *Attitude to English*, but not for the *Extramural* construct. There was one exception, however, participant number 50, was in comparison with other *vmbo* students, more motivated and answered "completely agree" for every question, with the exception of two questions. Yet, this participant also spoke several languages at home and because every student had the opportunity to withdraw at any time during the examination, the researcher did not delete this participant from further analysis.

3.4. Design and analysis

The data was first collected by a questionnaire which was generated and altered using Qualtrics [xm] software, Version 06.2019 (Qualtrics, 2019). Then, The data was analyzed using R Studio Version 3.5.3 (RStudio, 2019). The following sections will explain in more detail how the analysis was

conducted. First, the analysis of 67 items will be explained and how this came down to 40 items through careful examination and taking internal consistency into consideration. Then, the alterations of variables will be explained, which will be followed by a section which contains the statistical analysis of the several group comparisons that were made. The data were tested for normal distribution before parametric tests were conducted and the level of significance was set for $p < 0.05$.

3.4.Data Analysis

Attitudinal and motivational factors were the dependent variable of this study, and Education, Gender, and Year were the three independent variables. The factor Education consisted of two levels: *t-vmbo* and *vmbo*. Similarly, Gender also consisted of two levels: boys and girls, and Year consisted of three levels: Year 1; Year 2; and Year 3.

In Section 4.1, an t-test was used to compare the motivational score of bilingual (*t-vmbo*) and mainstream (*vmbo*) education. Cohen's d was used to test the effect size. In order to assess whether or not the effect is meaningful, the parameters suggested by Cohen (1988, 1992) are adhered: small effect $r = .10 – .29$; medium effect $r = .30 – .49$; large effect $r > 0.50$ (as cited in A. Field, Miles, & Z. Field, 2012, p. 58). This was also done for Section 4.3.1. compare the motivational score of bilingual (*t-vmbo*) and mainstream (*vmbo*) education per year.

For RQ2, Two-Way ANOVA was used to identify the main effects and interactions. Partial-omega squares were also subsequently conducted to test the meaningfulness of the significance. Interpretation of this is suggested by Kirk (1996) and is as follows: small effect $\omega p^2 = .01 – .05$; medium effect $\omega p^2 = .06 – .13$; large effect $\omega p^2 < .14$ (as cited in A. Field, Miles, & Z. Field, 2012, p. 455). Then, an independent samples t-test was used to investigate the significant main effects and interaction that were found.

Section 4.3.2. An one-way ANOVA was used to tests the motivational differences across years per school. In order to assess the effect size, eta-squared η^2 was used which is interpreted the same way as partial-omega squares.

The statistical tests conducted to investigate the differences between variables all adhered to the level of significance of .05.

Chapter 4: Results

The following section will present the findings of these study. First, the results between the two instruction types, *t-vmbo* and *vmbo,* are revealed. Then the findings in regard of the gender gap are demonstrated and the interactions between gender and year are presented after. Finally, the results from the open questions will be presented from both schools.

4.1. Comparative analysis of the motivational scales across instruction types.

The difference between *t-vmbo* and *vmbo* turned out to be significant ($p < 0.01$) for each variable as will be shown below. The descriptive statistics are presented in Table 4.

Table 4

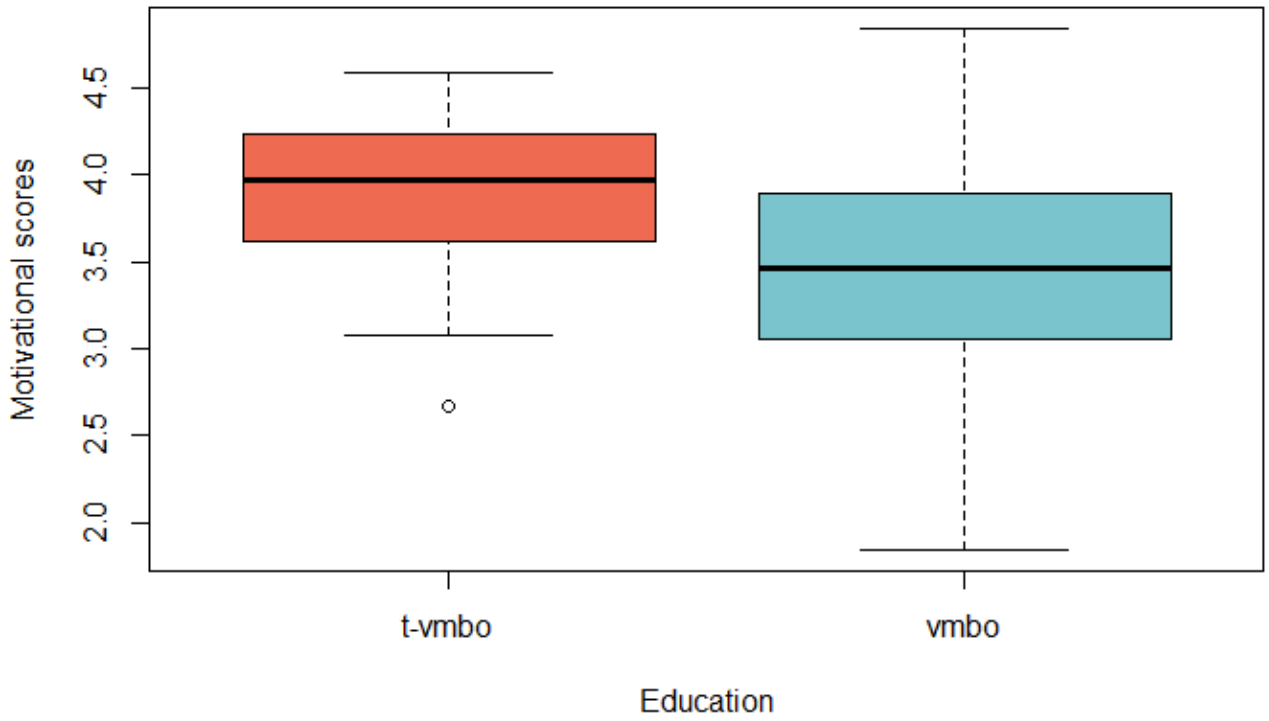
Descriptive statistics for each construct from mainstream and bilingual education.

	Bilingual education *t-vmbo* (N=63)		**Mainstream education *vmbo* (N=70)**				
Variables	M	SD	M	SD	*t*-value	Effect Size (*r*)	*p*-value
1. Attitude to English	4.25	.50	3.90	.66	*t*(127) = 3.42	.417	<.001
2. Attitude to Foreign Languages	3.71	.75	3.35	.75	*t*(129) = 2.78	.237	.006
3. Future Self	4.17	.63	3.54	.76	*t*(130) = 5.24	.417	< .001
4. Ought to Self	3.70	.67	3.31	.53	*t*(118) = 3.66	.319	.0003
5. English Lesson	3.70	.57	3.18	.83	*t*(123) =4.22	.356	<.001
6. Extramural	3.98	.59	3.54	.88	*t*(121) =3.46	.300	<.001
Total	3.91	.43	3.45	.56	*t*(127) = 5.35	.428	<.001

Table 4 reveals that *t-vmbo* students scored significantly higher for each construct ($p < .01$). The first construct, *Attitude to Foreign Languages*, had a small effect size ($r = .237$). The other five constructs had a medium effect size ($r = .30 – .417$). The total motivational difference between these groups was also calculated and resulted in a significant result: $t(127) = .428$, $p < .001$, with a medium to large effect size, $r = .428$. For each construct there were a couple of students who scored below average. However, for each construct this was a different participant and therefore not omitted from the research. Hence, these scores are presented in the outliers. These results are visualized in Figure 2 below.

Figure 2

Boxplots showing the motivational differences of students from bilingual education (left) and mainstream education (right).



Note. This outlier is caused by a third year girl t-vmbo student who considered learning English fun and a necessity, however she also assessed as "boring".

4.2. Gender differences in preparatory secondary vocational education.

In order to make an assessment of the motivational gender differences of *t-vmbo* and *vmbo* students a two-way ANOVA test was conducted. The section below will present the main effects for teaching, the main effects for gender, and the interaction effect. If a significant main effect occurred, a t-test was conducted to validate this finding.

4.2.1. Main effects for education

For each dependent variable, there was a main effect for teaching between (p<.05). Meaning, that overall there was a significant main effect of bilingual education on motivation $F(1,129)=26.23$, p<.001. This effect was large, ωp^2 =.166. Table 5 exhibits the results of the two-way ANOVA.

Table 5

The statistics of the main effects of education on the motivational score.

Dependent variables	ANOVA **analysis** Degrees of freedom 1,129		
	f-value	*p*-value	Effect size (ωp^2)
1. Attitude to English	11.11	.001	.072

2. Attitude to Foreign Languages	7.78	.006	.051
3. Future Self	192.31	<.001	.593
4. Ought to Self	12.20	<.001	.087
5. English Lesson	16.96	<.001	.107
6. Extramural	10.76	.001	.073
Total	26.23	<.001	.166

Because the ANOVA analysis revealed that education type had a significant main effect on the students' motivation, a t-test was conducted. On average, the *t-vmbo* boys from scored significantly higher than *vmbo* boys, $t(70) = 4.29$, $p < .001$ and the effect size was medium ($r = .455$). As can be seen below in Table 7, this difference was significant for every construct, with the exception of *Attitude to Foreign languages*. For this construct the *t-vmbo* boys did not score significantly higher than the *vmbo* boys ($p = .074$.).

Similarly, on average, *t-vmbo* girls scored significantly higher than the *vmbo* girls (55) = 3.19, $p = .002$, and the effect size was also medium, $r = .396$. However, for the following two constructs *t-vmbo* girls did not score significantly higher than the *vmbo* girls: *Ought to Self* ($p = .132$), and *Extramural* ($p = .135$). The descriptive statistics are presented in Table 6.

Table 6

Descriptive statistics for each construct from mainstream and bilingual education with the inclusion of boys and girls.

Constructs	**Gender**	**Bilingual Education** *t-vmbo*			**Mainstream Education** *vmbo*			T-test statistics			
		M	SD	N	M	SD	N	t	df	p	Effect size *r*
1. Attitude to English	boys	4.19	.456	35	3.87	0.68	41	2.43	70	.017	.279
	girls	4.32	0.55	28	3.95	0.64	29	2.36	54	.022	.305
2. Attitude to Foreign Languages	boys	3.52	0.748	35	3.21	0.73	41	1.81	71	.074*	.21
	girls	3.96	0.68	28	3.55	0.74	29	2.14	55	.037	.277
3. Future Self	boys	4.21	0.642	35	3.51	0.75	41	4.40	74	<.001	.455

	girls	4.11	0.62	28	3.47	0.78	29	2.89	53	.006	.369
4. Ought to Self	boys	3.77	0.659	35	3.27	0.57	41	3.49	68	<.001	.390
	girls	3.61	0.68	28	3.37	.467	29	1.53	48	.132*	.217
5. English Lesson	boys	3.69	0.630	35	3.21	0.84	41	2.87	73	.005	.319
	girls	3.70	0.50	28	3.14	0.81	29	3.12	47	.003	.415
6. Extramural	boys	4.09	0.470	35	3.56	0.82	41	3.53	65	<.001	.400
	girls	3.85	0.69	28	3.51	.98	29	1.52	50	.135*	.209
Total	boys	3.92	0.400	35	3.43	0.59	41	4.29	70	<.001	.455
	girls	3.90	0.47	28	3.48	0.53	29	3.48	55	.002	.396

Note. *No significant difference between *t-vmbo* girls and *vmbo* girls or *t-vmbo* boys and *vmbo* boys.

4.2.1. Main effects for gender: Motivational gender differences in *t-vmbo* and *vmbo*.

On average, there was no significant main effect for gender (p = .682). However, for one of the constructs, *Attitude to Foreign Languages*, there was a significant main effect of gender on motivation, $F(1,129)= 9.16$, $p= .003$. This effect was medium, $\omega p^2 = .057$.

Table 7

Main effects of gender on motivational scores for the six constructs.

Dependent variables	ANOVA -**analysis** (degrees of freedom (1,129)		
	f-value	*p*-value	Effect size (ωp^2)
1. Attitude to English	1.01	.316	0.00
2. Attitude to Foreign Languages	9.16	.003*	.057
3. Future Self	.48	.489	-.004
4. Ought to Self	.05	.817	-.007
5. English Lesson	.04	.844	.107
6. Extramural	1.14	.287	.001
Total	.17	.682	-.006

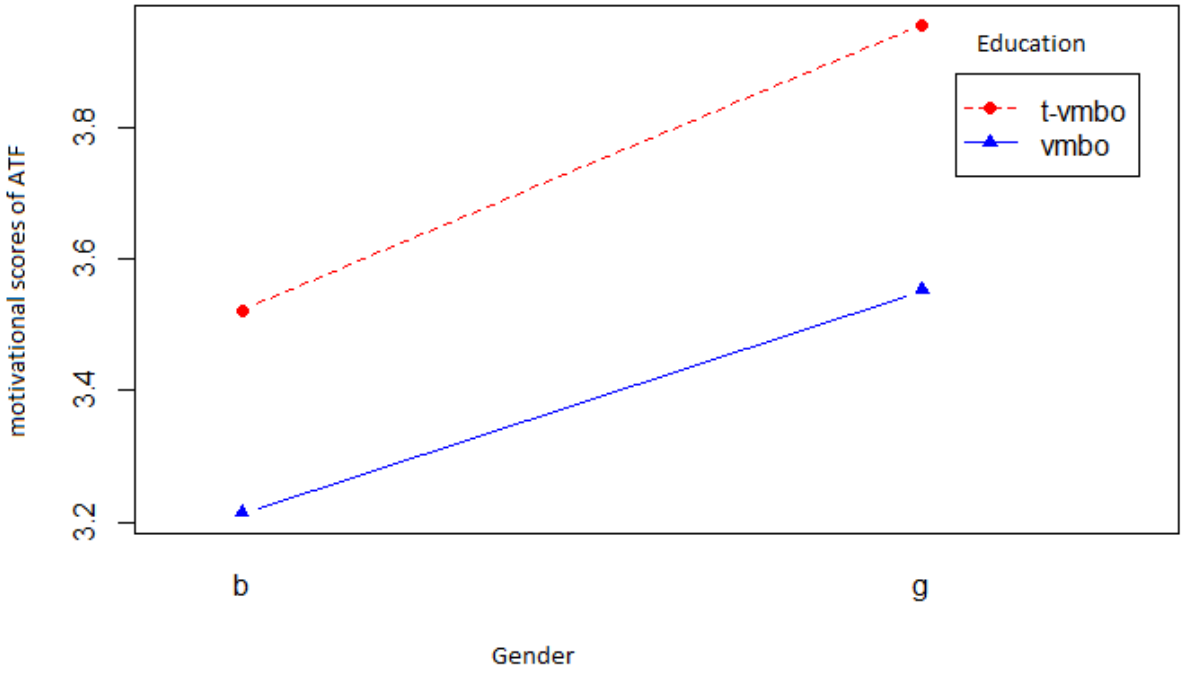
Note. *significant main effect.

The main effect of gender on *Attitude to Foreign Languages*, as also can be seen in Figure 3, demonstrated that the girl students were more motivated than the boys. Based on this finding, a t-test was conducted and it confirmed that girls partaking in CLIL programs are significantly more motivated than *t-vmbo* boys, $t(60)= -2.40$, $p= 0.02$. This effect was large, $r = .296$. However, girls from *vmbo* were

not significantly more motivated than their *vmbo* counterparts (p= .06). These descriptive statistics are presented in Table 3 and this main effect of gender is visualized in Figure 3:

Figure 3

Line graph showing the main effect for gender on ATF motivational scores for boys (left) and girls (girls) in bilingual education (red) and mainstream education (blue).



4.2.3. Interaction between education and gender.

There were no significant interactions between education and gender as can be seen in Table 8 below.

Table 8

The ANOVA -analysis test results for the interaction between education and gender for the six different constructs.

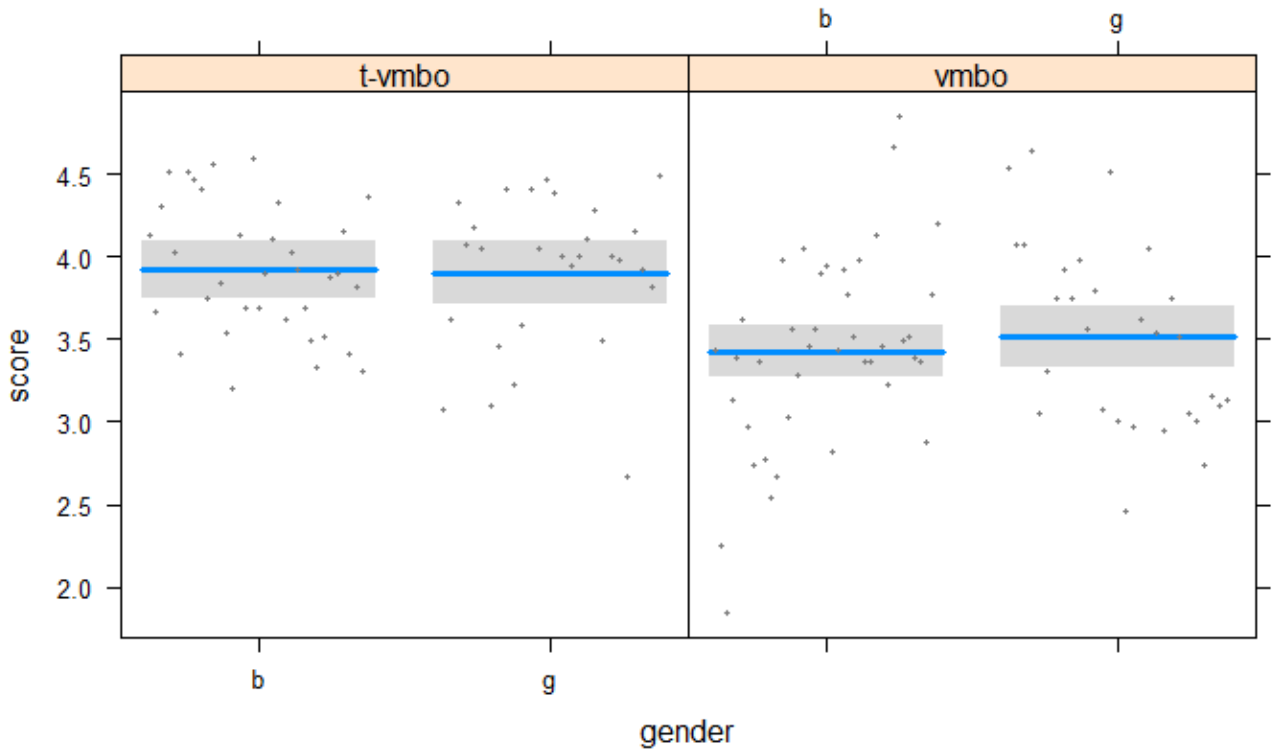
Dependent variables	**ANOVA -analysis**		
	f-value	*p*-value	Effect size (ωp^2)
1. Attitude to English	.06	.801	-.007
2. Attitude to Foreign Languages	.12	.708	-.007
3. Future Self	.01	.932	-.008

4. Ought to Self	1.53	.218	.004
5. English Lesson	.04	.843	.781
6. Extramural	.53	.468	-.004
Total	.16	.687	.166

As can be seen in Figure 4, the effects look very much the same, confirming the absence of a significant interaction between the variables ($p > .05$)

Figure 4

Plot of the different slopes of the effect of gender for students who received CLIL education (left) and those who did not (right).

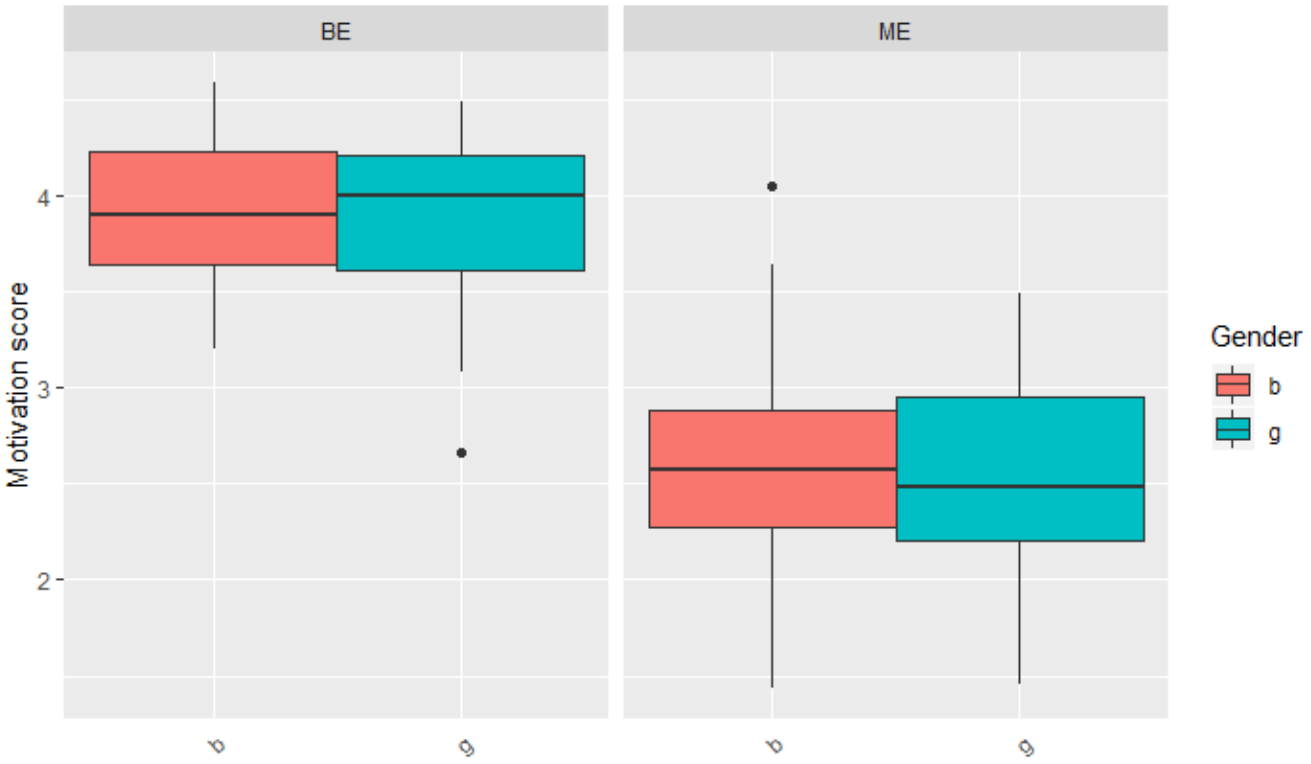


In conclusion, the statistical analysis revealed that there are significant differences between the *t-vmbo* and *vmbo* (p <.001). Especially, *t-vmbo* boys are significantly more motivated than *vmbo* boys (p <.001), with the exception for the construct *Attitude to Foreign Languages*. Also, *t-vmbo* girls were on

average significantly more motivated than *vmbo* girls (p=.002). However, there was not a significant difference (p > .05) between *t-vmbo* girls and *vmbo* girls for the constructs: *Ought to Self* and *Extramural*. Additionally, there was no gender gap between the girls and the boys from both education types. Meaning, *t-vmbo* girls did not score significantly higher than *t-vmbo* boys, with the exception for construct *Attitude to Foreign languages* (p= 0.02). Additionally, there were no significant differences between *vmbo* girls and boys (p > .05). Figure 5 below exhibits an overview of these findings.

Figure 5

Boxplot showing the dispersion in motivational differences (y-as) for boys (pink) and girls(blue) from bilingual education (left) and mainstream education (right).



Note. The outlier that is present is provided by a third-year t-vmbo girl student who did consider learning English as something she enjoyed and a necessaity, however she also through it was “boring”.

4.3. Motivational differences across schools years

This chapter presents the statistical analysis of both education settings across years. These school years correspond with the ninth (freshman), tenth (sophomore), and tenth (junior) grade. The first section will elaborate on the motivational differences between year groups from both educational settings, comparing *t-vmbo* with *vmbo*. Then, the next section will provide the statistical analysis of the motivational differences of each school and how this varies over the years, revealing the motivational changes of each educational setting in section 4.3.2.

4.3.1. Motivation differences between year groups of t-vmbo and vmbo.

Table 9 provides the descriptive statistics of first, second, and third year students. On average, *t-vmbo* students are more motivated than *vmbo* students for each construct in each year. These differences in scores are further explained below the table.

Table 9

Descriptive statistics for each construct from mainstream and bilingual education across year-groups.

		Bilingual education *t-vmbo*			**Mainstream education** *vmbo*		
Factor	Year	M	SD	N	M	SD	N
Attitude to English	1	4.31	.53	25	3.91	.74	20
	2	4.37*	.36	18	4.00	.55	21
	3	4.07	.54	20	3.82	.69	29
Attitude to Foreign Languages	1	3.79	.71	25	3.44	.71	20
	2	3.61	.63	18	3.45	.65	21
	3	3.71	.83	20	3.22	.84	29
Future Self	1	4.12*	.65	25	3.42	.80	20
	2	4.18*	.64	18	3.61	.63	21
	3	4.21*	.63	20	3.56	.83	29
Ought to Self	1	3.86*	.60	25	3.41	.46	20
	2	3.86*	.70	18	3.41	.60	21
	3	3.36	.61	20	3.17	.51	29
English Lesson	1	3.86	0.53	25	3.81	0.60	20
	2	3.86*	0.49	18	2.76	0.74	21
	3	3.35	0.56	20	3.06	0.78	29
Extramural	1	3.86	0.66	25	3.48	0.95	20
	2	4.06*	0.35	18	3.66	0.79	21
	3	4.08*	0.65	20	3.49	0.92	29

Note. * Significant difference in motivation between *t-vmbo* and *vmbo* students for this year and construct.

The motivational differences between first-year *t-vmbo* and *vmbo* students are significant for two constructs: *Future Self* and *Ought to Self*. On average, *t-vmbo* students have a greater tendency to imagine themselves using the L2 in their future than *vmbo* students. This difference is significant $t(36)= 3.15$, $p=.003$, and the effect is of medium size ($r =.464$). For the construct *Ought to Self*, *t-vmbo* students are also significantly more motivated $t(43)= 2.78$, $p=.008$, and the effect was of medium size as well (*r*

=.391). These results are visualized in Figures 6 and 7. Below the figures information is provided about outliers if there is an occurrence of such.

Figure 6

Boxplot showing the dispersion of motivational scores of first-year bilingual (left) and mainstream (right) students for the construct Future Self.

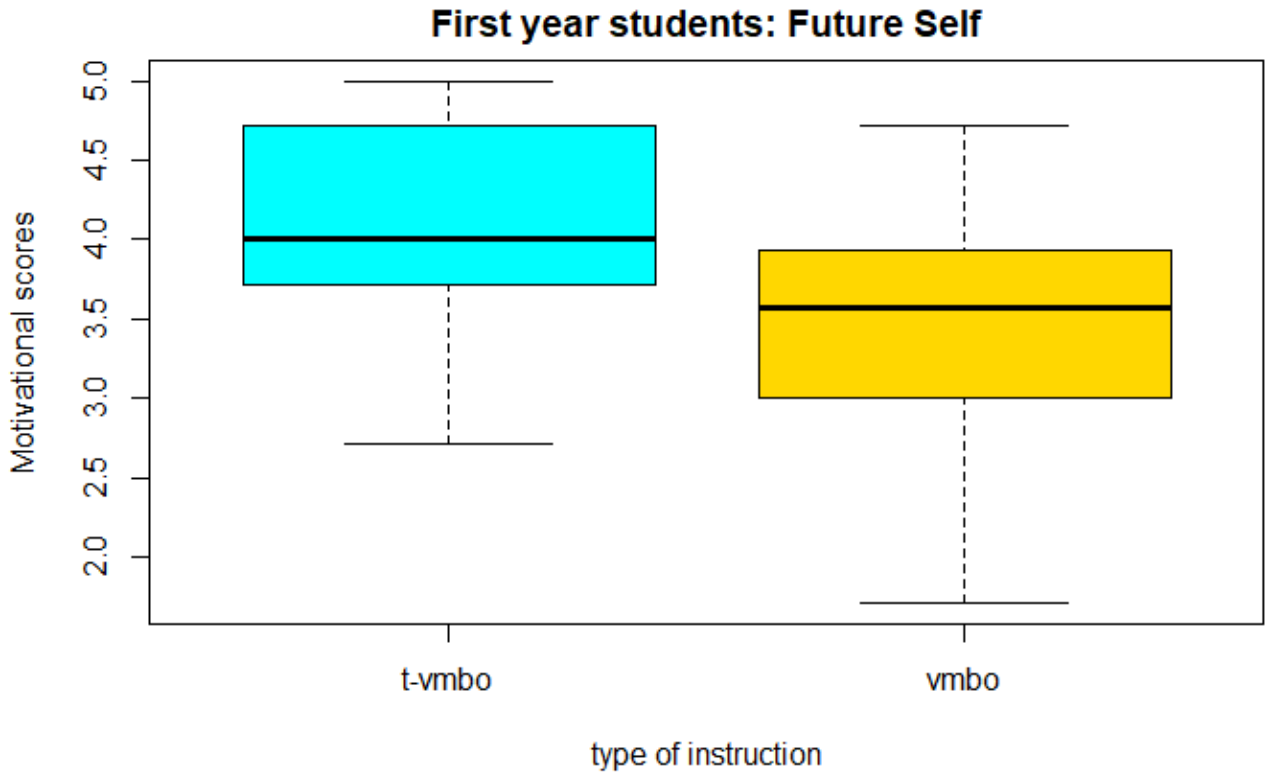
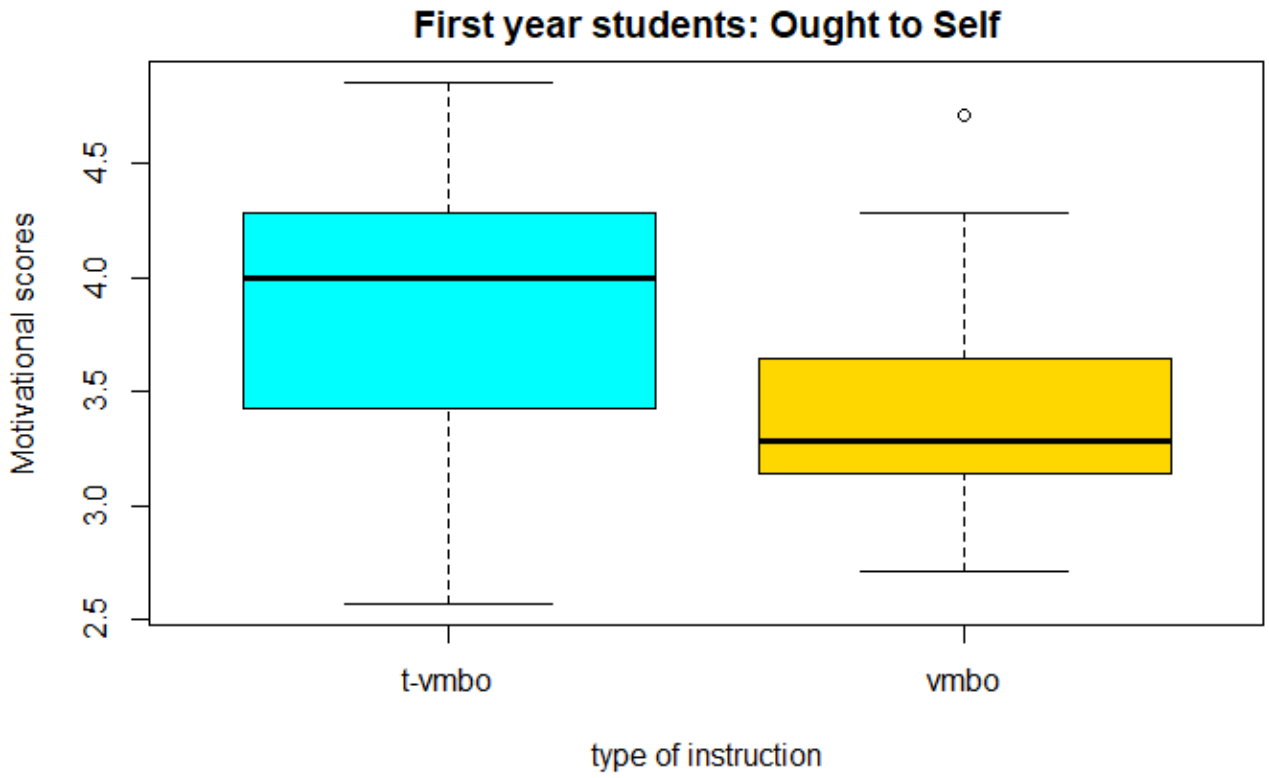


Figure 7

Boxplot showing the dispersion of motivational scores for the construct Ought to Self of two types of instruction: bilingual education (left) and mainstream education (right).

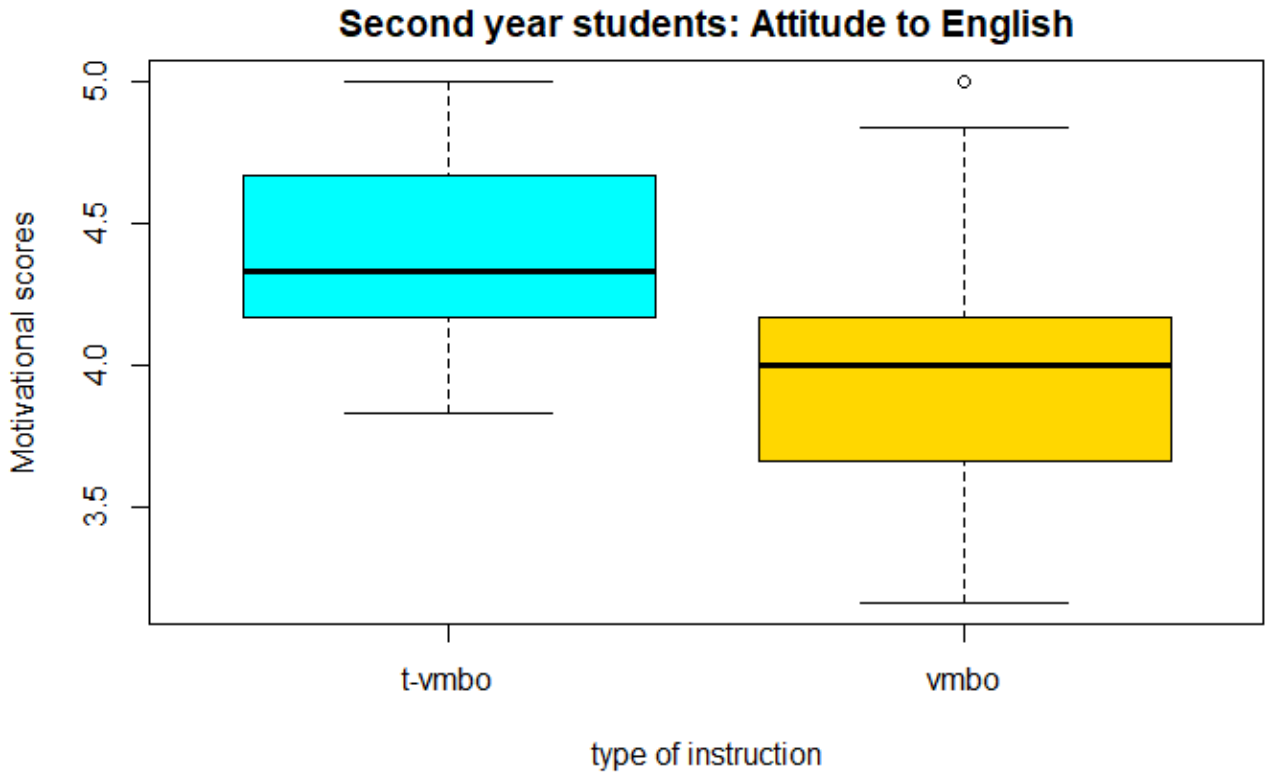


Note. The outlier presented in the figure (right) stems from data that is given by a *vmbo* boy student who really enjoys learning English and also speaks the language at home because he enjoys it.

The motivational scores of second-year students reveal that *t-vmbo* students are significantly more motivated than *vmbo* students for the following constructs: *Attitude to English*, *Future Self*, *Ought to Self*, *English Lesson* and *Extramural.* These will be discussed accordingly. The first construct revealed that *t-vmbo* students have a significant positive attitude to English in comparison with *vmbo* student $t(35) = 2.47$, $p = .02$, with a medium effect ($r = .385$). Similarly, *t-vmbo* students were significantly more motivated in regard of *Future Self* $t(36) = 2.81$, $p = .008$, and the effect size is medium ($r = .425$). Also, the role of parents and friends on the students' L2 motivation was significantly higher for *t-vmbo* students $t(34) = 2.12$, $p = .041$, and the effect size is small to medium ($r = .344$). Students of bilingual education have a significantly more positive attitude toward the *English Lesson* as well, $t(35) = 5.54$, $p < .001$, with a large effect size ($r = .684$). Lastly, the last construct, *Extramural*, also provides similar results as the aforementioned constructs. Again, the second-year *t-vmbo* students score significantly higher on this matter, $t(28) = 2.08$, $p = .047$ and the effect size is small to medium ($r = .363$). These results are visualized below in figures eight to twelve. Below the figures information is provided of the outliers if there is an occurrence of such.

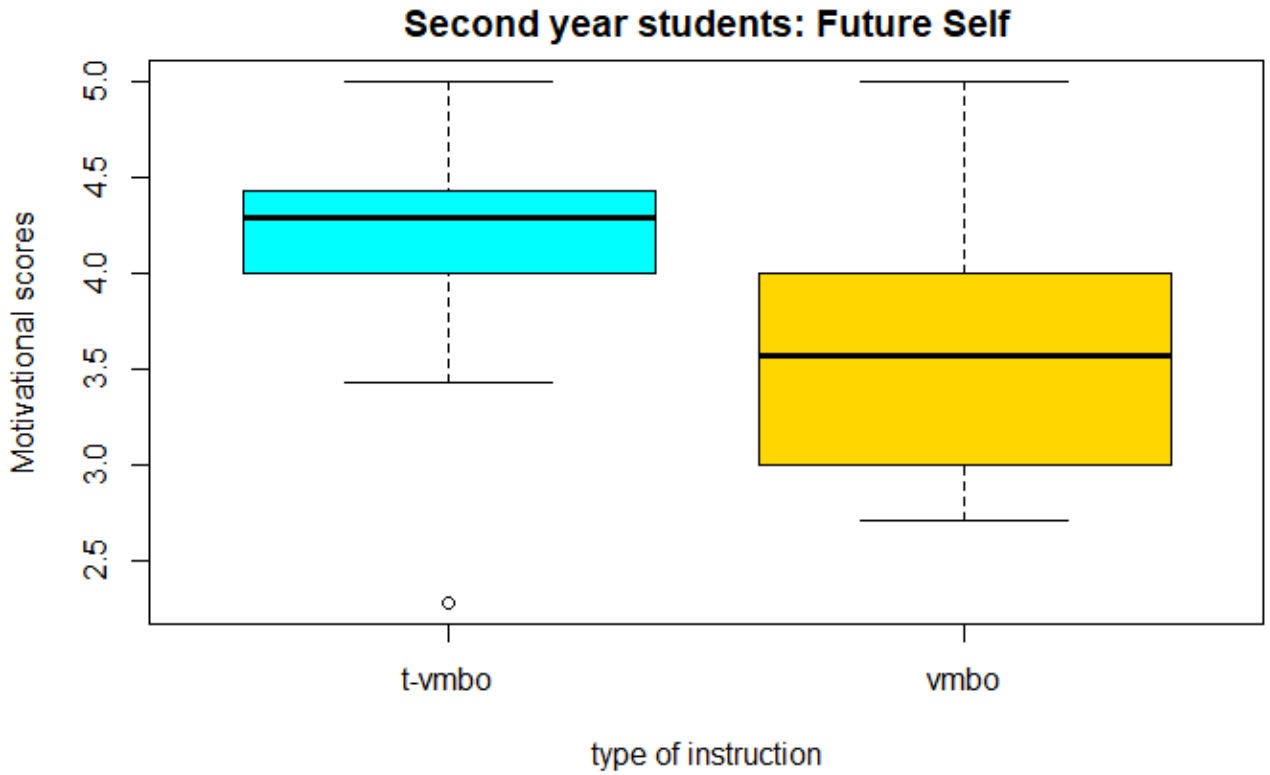
Figure 8.

Boxplot showing the dispersion of motivational scores of second- year bilingual (left) and mainstream (right) students for the construct Attitude to English.



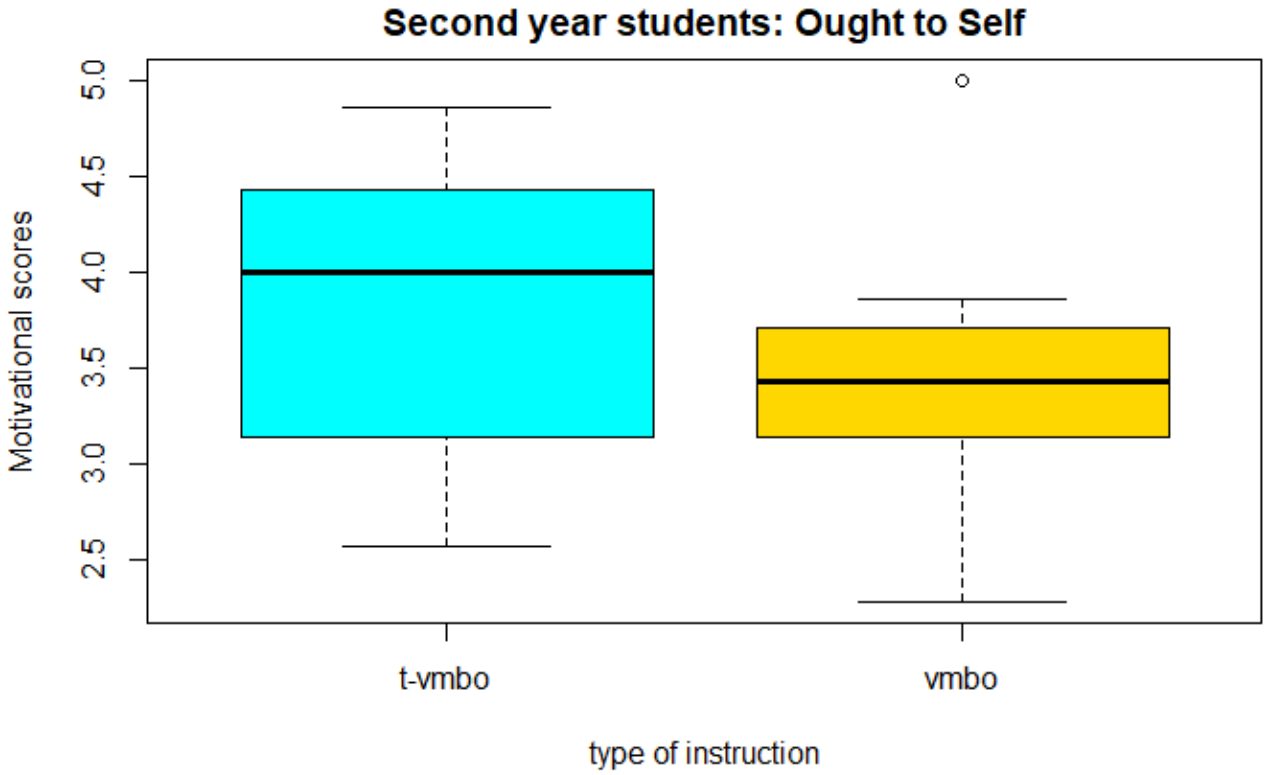
Note. The outlier is caused by two bot students who score 5 as average on the construct *Attitude to English*. One of them speaks multiple languages at home, assesses English as the world's most spoken language, and is relevant for his future career. The other student "really liked the English language".

Figure 9.
Boxplot showing the dispersion of motivational scores of second-year bilingual (left) and mainstream (right) students for the construct Future Self



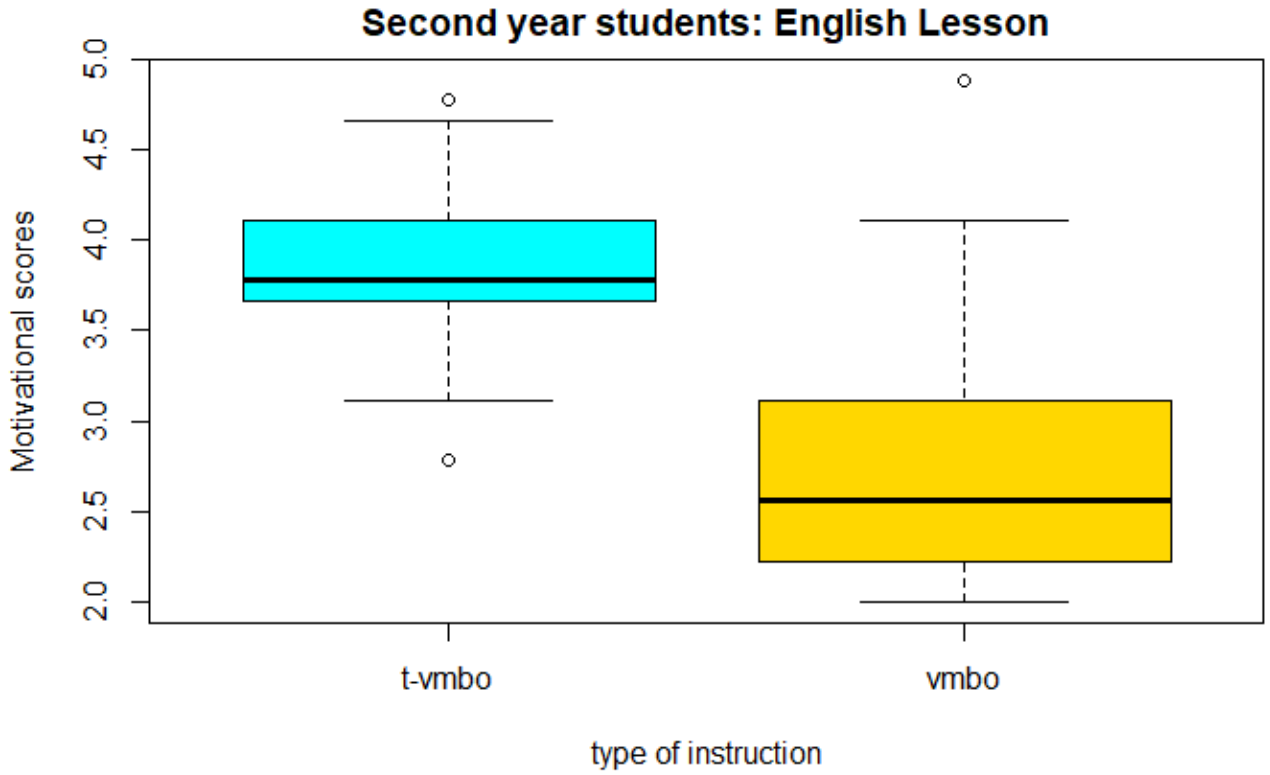
Note. The outlier that is part of the *t-vmbo* boxplot and comes from a second-year *t-vmbo* boy student who scored on average lower than his peers for the construct Future Self.

Figure 10.
Boxplot showing the dispersion in motivational scores in second-year bilingual (left) and mainstream (right) education for the construct Ought to Self.



Note. Just as for the construct Attitude to English, the same boy student who speaks multiple languages at home, scores above average in comparison with his peers.

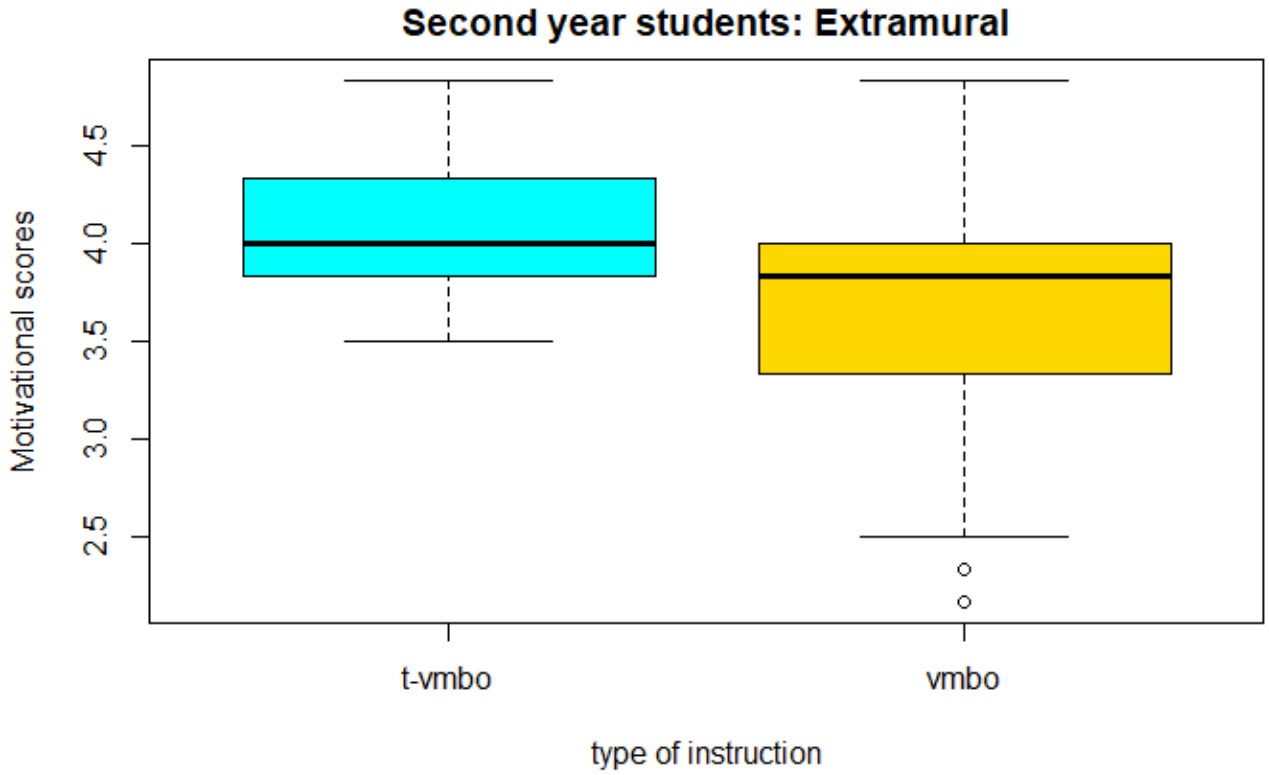
Figure 11.
Boxplot showing the dispersion of motivational scores for the construct English lesson of two types of instruction: bilingual education (left) and mainstream education (right).



Note. There are two data points that occur above and below the average score of second-year *t-vmbo* students (left). The highest average score for the construct English lesson was provided by a boy student who really enjoyed learning English. The lowest score is obtained by a *t-vmbo* boy student. He stated that he "already knew everything" to question whether he enjoyed learning English. On the right, the outlier is caused by *vmbo* boy student who really enjoys learning English and speaks multiple languages at home.

Figure 12

The distribution of Extramural's motivational scores for bilingual education (left) and mainstream education (right).



Note. The data from mainstream education (right) reveal two outliers. The lowest average is given by a second-year boy student who does not enjoy learning English because he does not like his teacher. The other outlier is provided by a girl student who likes learning English because she considers it easy.

The third year students also reveal a significant difference in motivation for two constructs: *Future Self* and *Extramural*. In comparison with *vmbo* students, *t-vmbo* students have a greater tendency to assess the English language as a necessity for their future. This is displayed in the scores for *Future Self* in which *t-vmbo* student score significantly higher than their mainstream counterparts $t(47)=3.13$, $p=.003$, with a medium effect size ($r=.417$). The other construct, *Extramura*l, third year *t-vmbo* students also reveal to be significantly more motivated $t(47)=2.58$, $p= .013$, with a medium effect size ($r=.353$). These two constructs and the significant differences are displayed in Figure 13 and Figure 14 below.

Figure 13

Boxplot revealing the dispersion in Future Self motivational scores of students of bilingual education (left) and those of mainstream education (right).

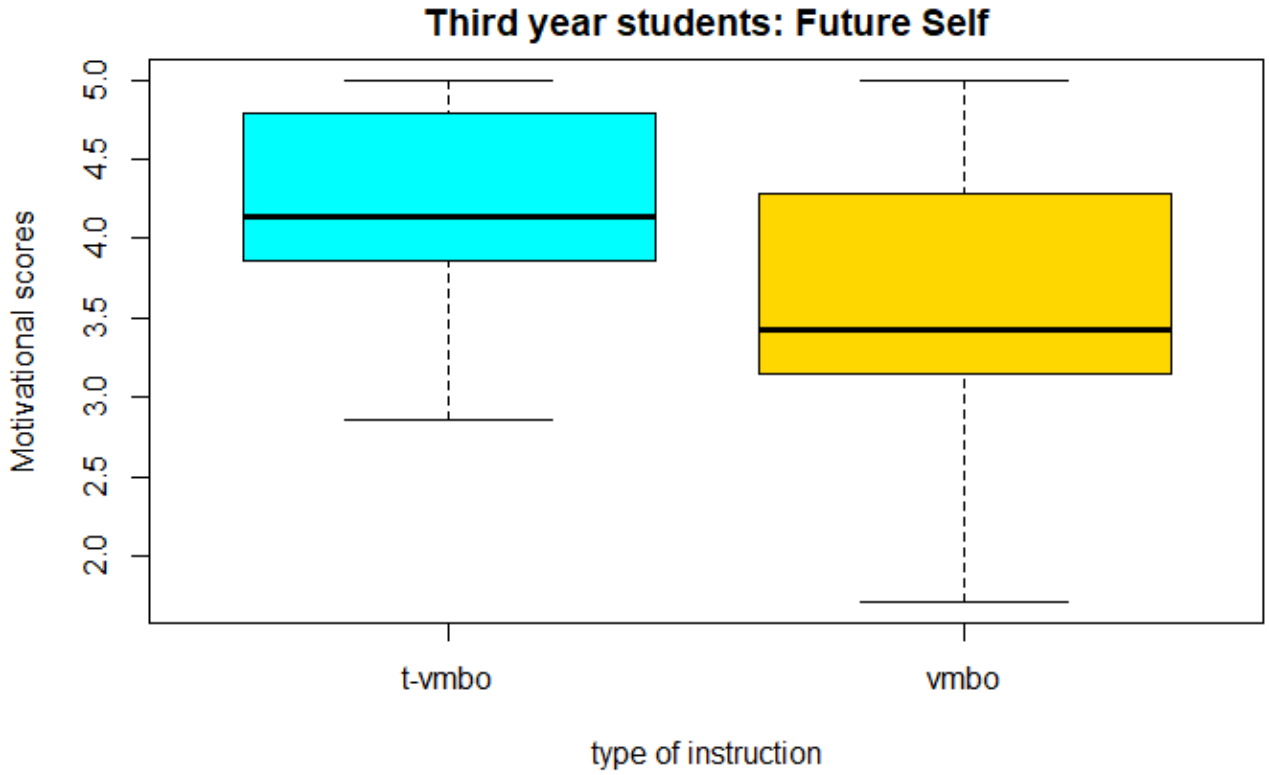
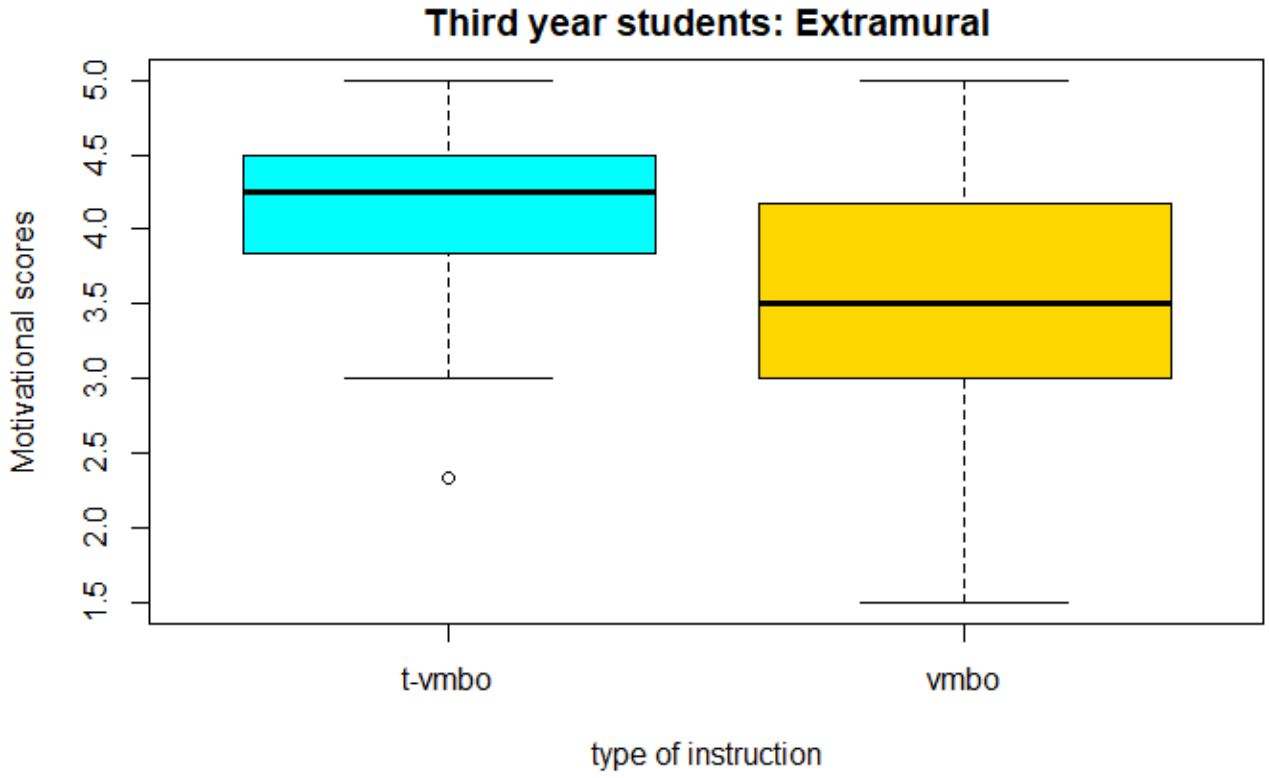


Figure 14

Boxplot showing the dispersion of motivational scores for the construct Extramural of two types of instruction: bilingual education (left) and mainstream education (right).



Note. The outlier caused by a girl t-vmbo student who did not frequently use English outside the classroom. She did mention that she used Surinamese at home.

In conclusion, the results reveal that each year *t-vmbo* students scored significantly higher in comparison with *vmbo* students on the motivational scale for different constructs. Firstly, first-year *t-*

vmbo students score significantly higher for two constructs: *Future Self* and *Ought to Self*. Secondly, second-year *t-vmbo* students are significantly more motivated for the following constructs: *Attitude to English, Future Self, English Lesson, Extramural,* and *Ought to Self*. Lastly, third year *t-vmbo* students are more motivated in regard of *Future Self* and *Extramural*. This means that each year *t-vmbo* scored significantly higher than *vmbo* students for the construct *Future Self*.

4.3.2 Motivational differences within the year groups of t-vmbo and vmbo.

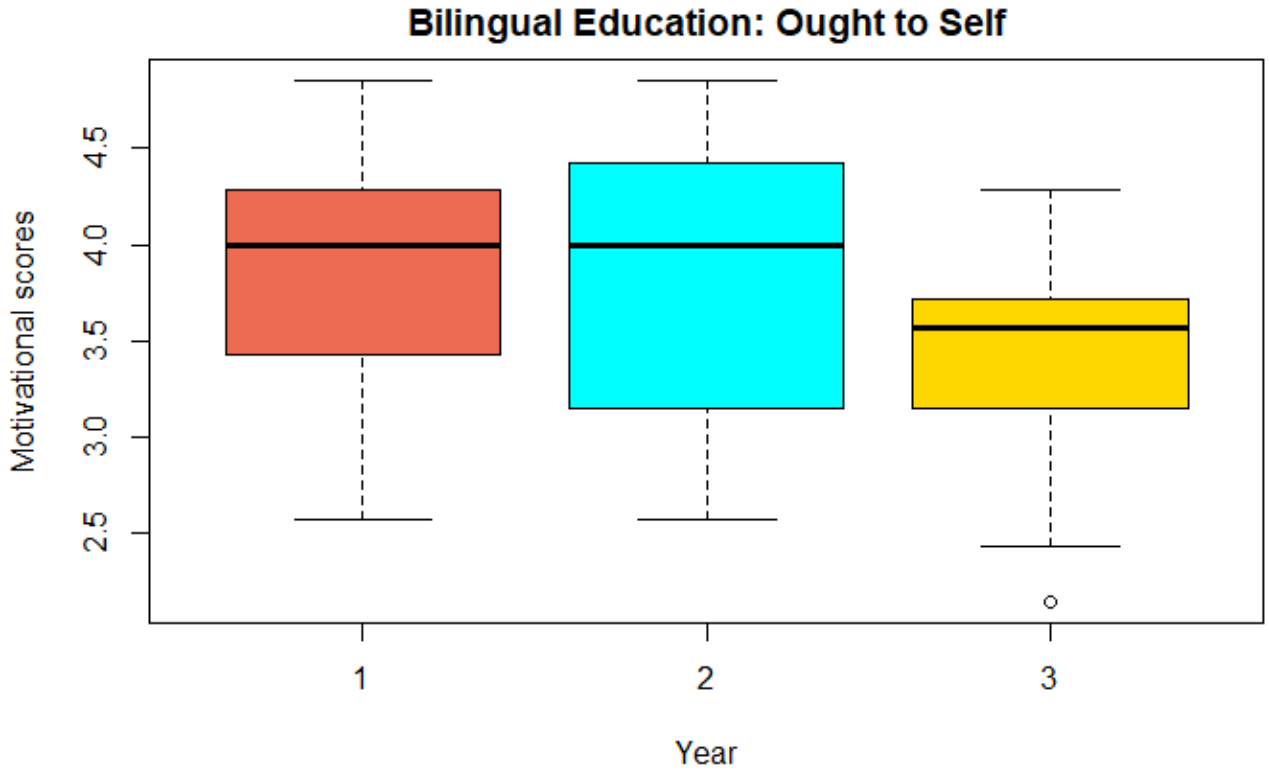
This section is divided in two sections. First, the motivational differences of *t-vmbo* students in their first, second, and third year are compared with each other. Then, the same will be done for mainstream education. The descriptive statistics are presented in Table 3.

4.3.2.1.Bilingual education: motivational differences across year groups.

On average, *t-vmbo* students did not vary significantly with their motivational scores across the years. However, there were two constructs that revealed that *t-vmbo* students' motivation decreased significantly over the years: *Ought to Self* and *English Lesson*. For the construct *Ought to Self*, there was a significant small effect $F(2,60) = 4.21$, $p = .019$, $\eta^2 = .123$. A Tukey post hoc analysis revealed that first-year students scored significantly higher than third year students ($p = .03$) and that second-year students were significantly more motivated than third year students ($p = .048$).

Figure 15

Boxplot showing the dispersion of the Ought to Self motivational scores for the three different years in bilingual education: first (orange), second (blue) and third year (yellow).

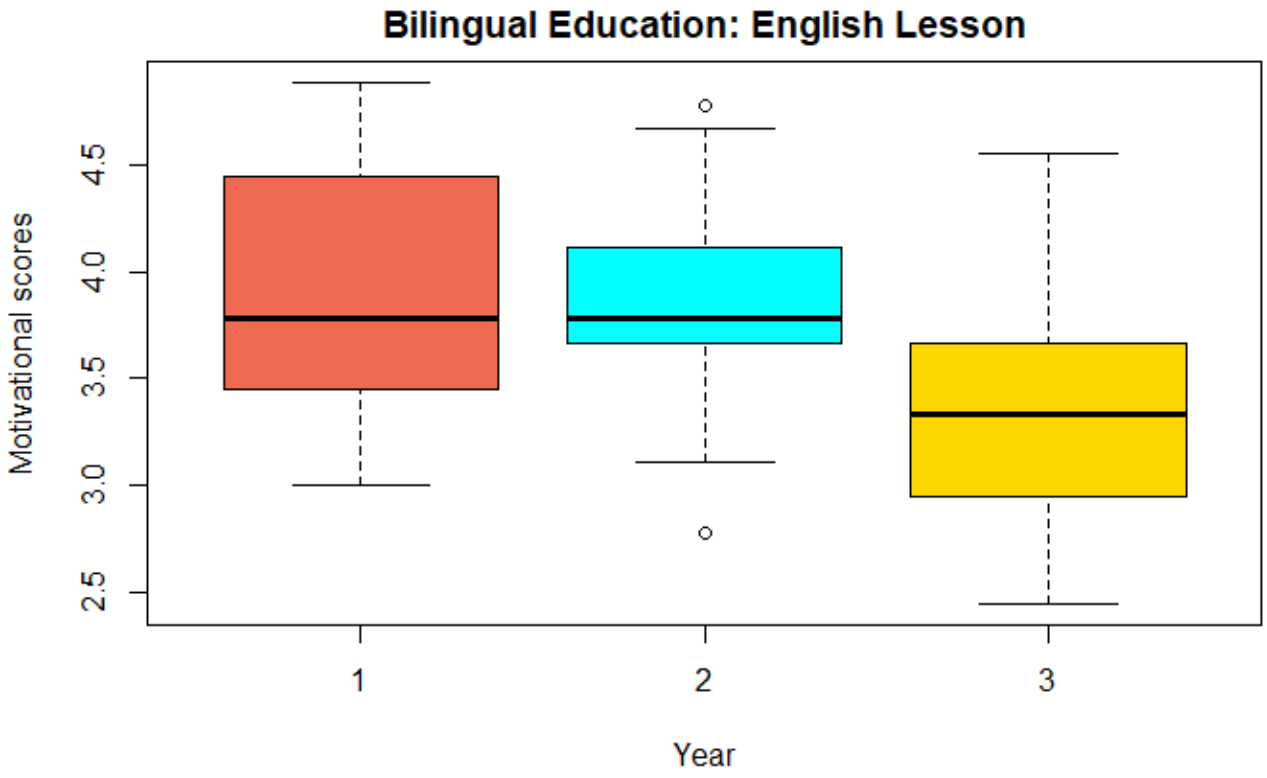


Note. The outlier corresponds with a third year boy student who completely disagreed with the statement that his parents find English an important statement. He also did not answered the open questions on the questionnaire.

Similarly, there was a significant effect of year on the motivational scores for the construct *English Lesson*, $F(2,60) = 6.304$, $p = .003$, $\eta^2 = .174$. Similar to the results of the construct *Ought to Self*, first and second-year students were significantly more motivated than the students from the third year ($p = .006$; $p = .012$). This is visualized in Figure 16.

Figure 16

Boxplot showing the dispersion of the English Lesson motivational scores for the three different years in mainstream education: first (orange), second (blue) and third year (yellow).



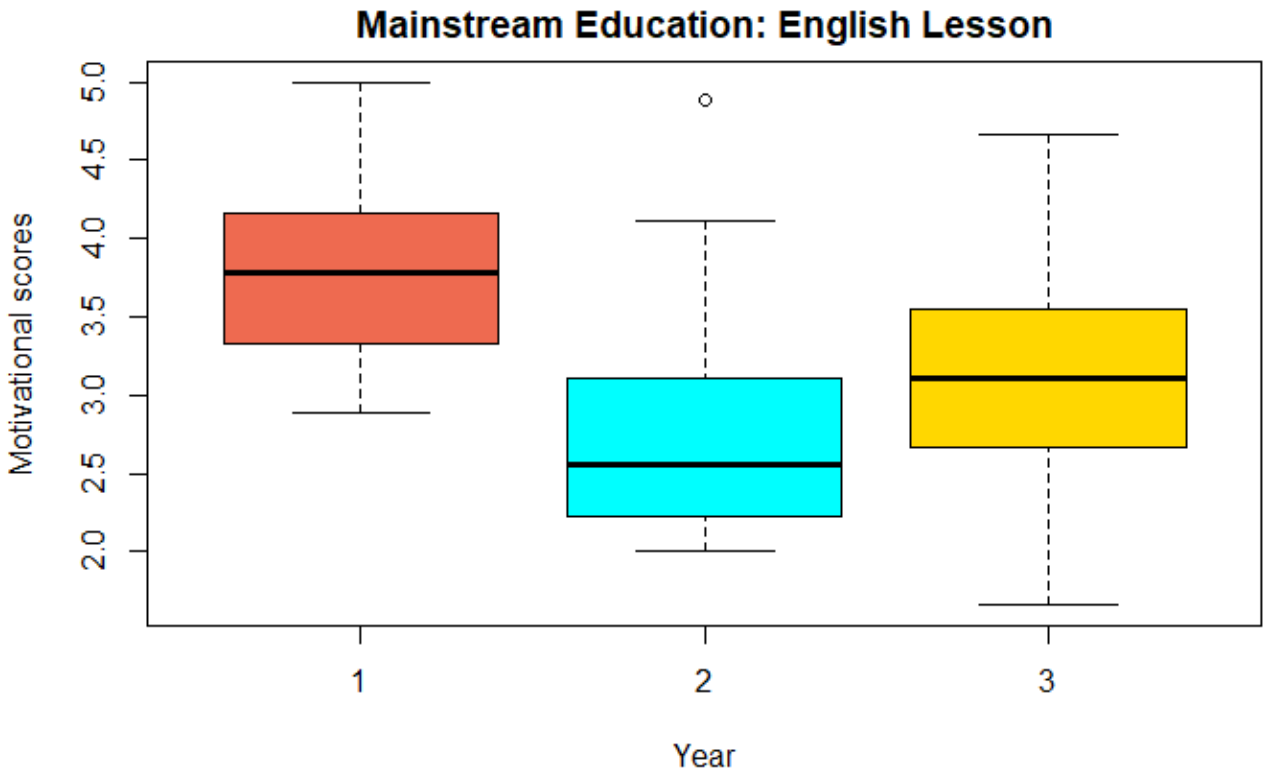
Note. Information about the outliers that are presented in year two are explained in Figure 11, in section 4.3.1.

4.3.2.2.Mainstream education: motivational differences across year groups.

The students from mainstream education did not demonstrate significant differences in their motivational scores (p>.05). There was one exception for the construct *English Lesson* which revealed that there was a small significant effect $F(2,67)=11.53$, $p < .001$, $\eta^2 = .256$. A Tukey post hoc analyses revealed that first-year students were not only significantly more motivated than the second-year students $p < .001$, but also the third year students, $p = .002$. This is visualized in Figure 17 below.

Figure 17

Boxplot with the dispersion of the English Lesson motivational scores for the three different years in mainstream education: first (orange), second (blue) and third year (yellow).



Note. The occurrence of an outlier in the second-year group is caused by one of the second-year boy students who spoke multiple languages at home, really enjoyed learning English, and needs to master English for his future career.

4.5. Open questions

This section provides an overview of the students' responses to the open question "Do you enjoy learning English and why?". Their answers are accounted for in the tables and divided among different categories. In Appendix F, categories are explained in more detail with examples. These categories are similar to the ones presented by Doiz, Lasagbaster and Sierra (2014b). The order in which the results are presented is similar to the order presented in the sections above. This section will be followed with the results that are obtained from the different year groups, comparing motivational differences across year groups for bilingual-and mainstream education. In each section, the students' positive- and negative attitudes toward learning English are presented and explained in that order.

4.5.1. Positive and negative attitudes: t-vmbo versus vmbo students

The students' attitudes toward learning English as a foreign language are categorized in Table 10 below. Their positive stance is divided among ten categories. In total, there are three categories that were mentioned most frequent by *t-vmbo* students: *Future* (30.2%), *Communication* (25.4%), and *Enjoyment* (22.8%). These categories correspond with answers such as: "knowing English increases my

chances of getting a good job", "it is fun to learn English", and "I can talk to people from other countries". The two categories *Future* and *Communication* also belong to the top two categories for *vmbo* students, however a lower percentage of *vmbo* students provided an answer that corresponded with these categories (15.7% and 11.4%). Similar to the category *Future*, *vmbo* students also liked learning English because it was easy to study (11.4%).

Table 10

Bilingual versus mainstream education: an overview of the students' positive attitude toward studying English.

T-vmbo (n=63)			Vmbo (n=70)		
Category	Tokens	%	Category	Tokens	%
Future	19	30.2	Communication	11	15.7
Communication	16	25.4	Future	8	11.4
Enjoyment	15	23.8	Easy	8	11.4
World language	6	9.5	Enjoyment	7	10
Learning	6	9.5	Learning	7	10
Easy	2	3.2	World language	4	5.7
Movies &Video's	1	1.6	Teacher	2	2.6
Social Media	1	1.6	Gaming	1	1.4
			Challenge	1	1.4
			Films & series	1	1.4

There were also students who did not, or also[12], disliked studying English. Their responses are summarized in Table 11. For both groups, students provided similar reasons as to why they did not like learning English and especially responses related to tediousness (*Boring*) scored very high in comparison with the other categories (12.7% and 14.3%)

Table 11

[12] Some students answered that they did both. They liked and disliked studying English.

Bilingual versus mainstream education: an overview of the students' negative attitudes toward studying English.

T-vmbo (n=63)			Vmbo (n=70)		
Category	Tokens	%	Category	Tokens	%
Boring	8	12.7	Boring	10	14.3
Not challenging	4	6.3	Difficult	4	5.7
Takes time	2	3.2	Teacher	4	5.7
			Not challenging	2	2.9
Difficult	1	1.6	Work load	1	1.4
			Dislike	1	1.4

4.5.2. Positive and negative attitudes: t-vmbo boys versus vmbo boys.

In total there were eight categories that corresponded with the boy's students' positive attitude regarding studying English, which are presented in Table 12. Two categories were striking and will be discussed further: *Communication* and *Future*. For both groups, the boy students had a tendency to assess learning English positively because it was important for when they wanted to talk with foreigners (*Communication*). With 17.1%, both groups assessed this category to the top two as to why they enjoyed learning English. Contrarily, there is a notable discrepancy when comparing the results given in regard of the category *Future. T-vmbo* boy students mentioned most frequently that they liked learning English because they needed it for their future career or education (28.6%), whereas the boy students from mainstream education revealed a lower number on this account (7.3%).

Table 12

T-vmbo boys versus vmbo boys: an overview of the students' positive attitude toward studying English.

T-vmbo boys (n=35)			Vmbo boys (n=41)		
Category	Tokens	%	Category	Tokens	%
Future	10	28.6	Communication	7	17.1
Communication	6	17.1	World language	4	9.8
Enjoyment	5	14.3	Learning	4	9.8
World language	4	11.4	Easy	4	9.8
Learning	2	5.7	Future	3	7.3

Movies &Video's	1	2.9	Enjoyment	3	7.3
Easy	1	2.9	Gaming	1	2.4

Similar to the category *Communication*, 17.1% of the boy *vmbo* students' responses also considered it boring to learn English and therefore answered 'no' to the question whether they liked to study English. As can been seen in Table 13, *t-vmbo* students also consider this category the main reason why they do not like to learn English (12.7%).

Table 13

T-vmbo boys versus vmbo boys: an overview of the students' negative attitudes toward studying English.

T-vmbo (n=35)			Vmbo (n=41)		
Category	Tokens	%	Category	Tokens	%
Boring	6	12.7	Boring	7	17.1
Not challenging	3	6.3	Difficult	3	7.3
Takes time	2	3.2	Teacher	3	7.3
			Dislike	1	2.4

4.5.3. Positive and negative attitudes: t-vmbo girls versus vmbo girls:

The responses of the girls yielded eight categories. There were three categories that were most frequently mentioned by *t-vmbo* girl students and *vmbo* girl students: *Communication*, *Enjoyment* and *Future*. However, the responses of *t-vmbo* girls students are more frequently occurrent than the responses of *vmbo* girl students as can been seen in Table 14. Especially, for the categories *Communication* (35.7 vs. 13.8) and *Enjoyment* (35.7 vs. 13.8).

Table 14

T-vmbo girls versus vmbo girls: an overview of the students' positive attitude toward studying English.

T-vmbo girls (n=28)			Vmbo girls (n=29)		
Category	Tokens	%	Category	Tokens	%
Communication	10	35.7	Future	5	17.2
Enjoyment	10	35.7	Communication	4	13.8
Future	9	32.1	Enjoyment	4	13.8
Learning	4	14.3	Easy	4	13.8

World language	2	7.1	Learning	3	10.3
Easy	1	3.8	Teacher	2	6.9
Social media	1	3.8	Social Media	1	3.4
			Films & Series	1	3.4

There were four categories formed after the assessment of the girls' negative responses: *Boring*, *Not challenging*, *Difficul*t and *Teacher* (Table 15). In comparison with their positive responses, there were not many girl students who did not like to study English, with the exception of one category: *Boring*. The data reveals that *t-vmbo* girls (7.1%) and *vmbo* girls (10.3%) do not like to study English because they consider it boring.

Table 15

T-vmbo girls versus vmbo girls: an overview of the students' negative attitude toward studying English.

T-vmbo girls (n=28)			Vmbo girls (n=29)		
Category	Tokens	%	Category	Tokens	%
Boring	2	7.1	Boring	3	10.3
Not challenging	1	3.6	Not challenging	2	6.9
Difficult	1	3.6	Difficult	1	3.4
			Teacher	1	3.4

4.5.4. Bilingual education: boys versus girls.

The *t-vmbo* students' attitudes toward learning English as a foreign language are categorized in Table 16 below. Their positive stance is divided among eight categories. In total, there are three categories that were mentioned most frequent: *Future*, *Enjoyment* and *Communication*. Responses related to the category *Future* were mentioned often in both groups. Both boys and girls particularly liked learning English because they needed it for their future education or career (28.6% and 32.1%), whereas the girl students enjoyed learning English for fun much more than the boy students (35.7% vs. 14.3%). Similarly, a higher percentage of girl students tends to enjoy learning English for communication purposes (35.7% vs. 17.1%).

Table 16

Bilingual education: an overview the t-vmbo students' positive attitudes.

Boys (n=35)			Girls (n=28)		
Category	Tokens	%	Category	Tokens	%
Future	10	28.6	Communication	10	35.7
Communication	6	17.1	Enjoyment	10	35.7
Enjoyment	5	14.3	Future	9	32.1
World language	4	11.4	Learning	4	14.3
Learning	2	5.7	World language	2	7.1
Movies &Video's	1	2.9	Easy	1	3.6
Easy	1	2.9	Social media	1	3.6
			Films/Video's		

In comparison with their positive responses, there was less data that signified that they did not like to study English, as can be seen in Table 17. The category that is most often mentioned by the bilingual students is: Boring. Especially the boy students who did not like to study for English said that this was because it was boring (12.7% vs. 7.1%)

Table 17

Bilingual education: an overview of the students' negative attitude toward studying English.

t-vmbo boys (n=35)			t-vmbo girls (n=28)		
Category	Tokens	%	Category	Tokens	%
Boring	6	12.7	Boring	2	7.1
Not challenging	3	6.3	Not challenging	1	3.6
Takes time	2	3.2	Difficult	1	3.6

4.5.5. Mainstream education: boys versus girls.

Both boys and girls particularly enjoyed learning English because of its communication purposes (17.1% and 13.8%). Also, there was an consensus with regard to learning English because they wanted to improve their spelling, grammar or knowledge as can be seen in the category *Learning* (9.8%

and 10.3%). However, there were also some discrepancies between the boys and girls wo follow the mainstream track. The responses of the girls indicate that they enjoy it because it is necessary for their *Future* (17.2%), whereas *vmbo* boys do not consider this to be the main reason why they enjoy learning English (7.3).

Table 18

Mainstream education: an overview of the students' positive attitude toward studying English

Vmbo boys (n=41)			Vmbo girls (n=29)		
Category	Tokens	%	Category	Tokens	%
Communication	7	17.1	Future	5	17.2
World language	4	9.8	Communication	4	13.8
Learning	4	9.8	Enjoyment	4	13.8
Easy	4	9.8	Easy	4	13.8
Future	3	7.3	Learning	3	10.3
Enjoyment	3	7.3	Teacher	2	6.9
Gaming	1	2.4	Social Media	1	3.4
			Films & Series	1	3.4

If the students did not enjoy learning English, both groups mentioned most frequently that this was because they considered it boring. Both boys and girls mentioned this responses related to this category most often (17.1% and 10.3%).

Table 19

Mainstream education: an overview of the students' negative attitude toward studying English.

Vmbo boys (n=28)			Vmbo girls (n=29)		
Category	Tokens	%	Category	Tokens	%
Boring	7	17.1	Boring	3	10.3
Difficult	3	7.3	Not challenging	2	6.9
Teacher	3	7.3	Difficult	1	3.4
Dislike	1	2.4	Teacher	1	3.4

4.5.6 T-vmbo across years and vmbo across years

This section will first focus on the responses of each year groups of both schools, focusing first on the positive responses and then the negatives. Then, these results from both schools will be compared.

Table 20 exhibits the responses of the *t-vmbo* students across years. As can be seen, the first two years had is a similar top three. The categories *Future*, *Communication* and *Enjoyment* are mentioned most frequently by these two groups, whereas third year students place less emphasis on that they *enjoy* studying English (10%) and put more emphasis on the fact that they like learning English because it is a *World Language* (20%).

Table 20

Bilingual education: an overview of the students' positive attitudes toward studying English across years.

Bilingual Education						
Category	**1st year students (n=25)**	**%**	**2nd year students (n=18)**	**%**	**3rd year students (n=20)**	**%**
1. Future	8	32	7	38.9	4	20
2. Communication	7	28	3	16.6	6	30
3. Enjoyment	7	28	6	33.3	2	10
4. World language	2	8			4	20
5. Learning	3	12	2	11.1	1	5
6. Easy	1	4	1	5.6		
7. Movies &Video's	1	4				
8. Social media					1	5

Also, it seems that in their third year *t-vmbo* students consider learning not as much fun anymore as they consider it tedious (*Boring*) as the amount of responses regarding this category increases as they get older (4% vs. 11.1% vs. 25%). These results are visualized in Table 22.

Table 21

Bilingual education: an overview of the students' negative attitudes toward studying English across years.

Bilingual Education						
Category	**1st year students (n=25)**	**%**	**2nd year students (n=18)**	**%**	**3rd year students (n=20)**	**%**
1. Boring	1	4	2	11.1	5	25

2. Not challenging	1	4	1	5.6	2	10
3. Takes time	1	4			1	5

The responses of mainstream students are presented in Table 22. Their responses indicate that over the years a gradual decline occurs for the category *Enjoyment* (15% vs. 14.2% vs. 3.4%). There are however also two categories that become more prominent over the years, namely *Communication* (20% vs. 24.1%) and *World Language* (5% vs. 10.3%).

Table 22

Mainstream education: an overview of the students' positive attitudes toward studying English across years.

Mainstream						
Category	**1st year students (n=20)**	**%**	**2nd year students (n=21)**	**%**	**3rd year students (n=29)**	**%**
Communication	4	20			7	24.1
Enjoyment	3	15	3	14.2	1	3.4
Learning	3	15	2	9.5	2	6.9
Future	2	10	4	19	2	6.9
Easy	2	10	4	19	2	6.9
Teacher	2	10				
World language	1	5			3	10.3
Gaming	1	5				
Challenge	1	5				
Films and series					1	3.4

The negative responses of *vmbo* students are summarized in Table 24. There is a gradual decline over the years looking at the category difficult (15% vs. 4.8%). In year three, this was not mentioned by any of the students. However, in their third year, *vmbo* students do not like studying English mainly because they consider it boring (20.7%).

Table 24

Bilingual education: an overview of the students' negative attitudes toward studying English across years.

Mainstream						
Category	**1st year students (n=20)**	**%**	**2nd year students (n=21)**	**%**	**3rd year students (n=29)**	**%**
Difficult	3	15	1	4.8		
Boring	2	10	2	9.5	6	20.7
Teacher			3	14.3	1	3.4
Not challenging			2	9.5		
Work load	1	5				
Dislike	1	5				

When comparing the results given by both schools, there are three categories that behave similar: *Communication, Enjoyment, Future* and *Boring*. For both schools, there is an increase in responses related to *Communication*, whereas less students in their third year seem to like studying English because they enjoy it. In their second year, both *t-vmbo* an *vmbo* students, mention most often that they enjoy learning English for future purposes, whereas in their third year not as many responses were given regarded this category. Also, for both schools there was a gradual increase of responses that were mentioned in regard of the category *Boring*.

Chapter 5. Discussion

The aim of this paper was to determine whether there are motivational differences between students from bilingual- and mainstream education. In order to assess this, three research questions were formulated. In this chapter, each research question will be addressed accompanied by the findings of the conducted study and previous research.

5.1. Are there differences in motivation for learning English between t-vmbo and vmbo students?

The findings presented in Chapter 4.1 indicate that students who are exposed to the CLIL program are significantly more motivated than *vmbo* students in regard of their attitudes toward English and foreign languages, future L2 aspirations, social engagement in the L2, societal expectations of mastering a L2, the L2 classroom experience, and the L2 learning experience outside the classroom. These findings corroborate with prior studies on bilingual education (e.g. Heras and Lasagabaster ,

2014a ; Mearns, de Graaff, Coyle, 2017), who also found that students who are exposed to the CLIL pedagogy exhibit higher motivation than students from mainstream education.

The main characteristics, which are postulated in the 4Cs framework[13], could provide a possible explanation for the higher levels of motivation for Ideal L2 Self among *t-vmbo* students. This framework, for example, emphasizes the importance of raising cultural awareness, global citizenship, and communication. Through international projects and incorporation of culture in the curriculum students are more aware of English's status as a global language and of English's potential use in their future aspirations (Coyle, Hood, & Marsh, 2010; Tanner & de Graaff , 2011). This could serve as a possible explanation as to why *t-vmbo* students scored higher on questions such as "it is important to master the English language", because they participate in activities in which they need the FL to communicate. Also, The lesson dynamics of a CLIL classroom differ from mainstream education as it creates the opportunity to increase motivation by its interactive nature, challenging the higher order thinking processes (Banegas, 2013). This is also shown in the responses of *t-vmbo* students in Section 4.5.1. as they seem to enjoy learning English to a larger extend than students from mainstream education.

Beside the higher levels of motivation for *Ideal Self* and *Learning Experience*, *t-vmbo* students also experience higher expectations from their societal environment, as is shown with their responses regarding *Ought to Self*. This corroborates with the findings of Sieben and van Ginderen (2014), who have suggested that that pre-university students from the bilingual track are inherently more motivated because they come from higher socioeconomic backgrounds. However, it must be taken into consideration that the participants of this study follow the preparatory secondary track and are associated with a higher number of socioeconomically disadvantaged families (Ministerie van Onderwijs, Cultuur, en Wetenschap, 2019). Also, as societal expectations can also originate from factors that surpass the parental encouragement, this study included questions that targeted the students' peers as well. Considering that many factors could have influenced the results of *Ought to Self* in this study, the analysis of such should be treated with careful attention.

5.2. What are there motivational differences between boys and girls from mainstream and bilingual education?

In this section the results are discussed in the same order as they are presented in Section 4.2. Firstly, the motivational differences between educational contexts are compared: bilingual boys students versus *vmbo* boys; *t-vmbo* girls versus mainstream girl students. Secondly, the absence of a gender gap is discussed. Finally, the interpretation of interactions between educational contexts, motivational behavior and gender differences are presented.

Firstly, as expected from the previous section, *t-vmbo* boys demonstrated higher levels of

[13] Communication, Content, Culture, and Cognition (Coyle, Hood, and Marsh, 2010). This is described in more detail in Section 2.2.

motivated behavior than *vmbo* boys. There was one exception, however, as *t-vmbo* boys were not significantly more motivated than *vmbo* boys in regard of their *Attitude toward Foreign Languages*. Research shows that boys are generally less motivated in regard of learning foreign language (e.g. Heras and Lasagabaster, 2014a). A possible reason as to why *t-vmbo* boys are generally more motivated to learn English, but not foreign languages, could be due to the emphasis on English as a global language within a CLIL curriculum (Tanner & de Graaff, 2011). Additionally, researchers Henry and Cliffordson (2013) and Iwaniec (2019) have also suggest that the motivation for learning a foreign language is culturally dependent and that the contact with the new language can influence the motivational behavior.

The *t-vmbo* girl students were also generally more motivated than the girl students who participate in mainstream education. However, this study does reveal that girls from both educational contexts are influenced by societal expectations in a similar manner as no significant effect was found for *Ought to Self*. On the one hand, this coincides with the observations made by Azarnoosh and Birjandi (2012) as they stated girls are more influenced by the expectations of others. On the other hand, this dismisses the statement that students from bilingual education are generally more motivated as their parents have a higher socioeconomic background. There was also no difference found between the English learning environment outside the classroom, which corroborated with the findings of Henry (2014) who stated that girls have a tendency to prefer a L2 in a classroom, and not by playing videogames or online behavior. This is also confirmed with the girls' responses from both educational contexts in Section 4.5.3.: both groups do not mention often that they use English for video games, social media, or films.

Secondly, the findings of Akram and Hjani (2013), Henry and Cliffordson (2013), Doiz, Lasagabaster, and Sierra (2014a) and this study contradicts the fact that there are significant motivational differences between boys and girls for the construct *Ideal L2 Self* in both educational contexts. Meaning, there is no occurrence of a gender gap in regard of their motivational behavior toward L2 aspiration, with the exception of the *t-vmbo* students' perspective on learning foreign languages. The findings reveal that *t-vmbo* girl students are more motivated to learn and enjoy foreign languages than *t-vmbo* boys. Similar results are presented by Henry and Cliffordson (2013) who observed that Swedish female students were significantly more motivated in regard of foreign languages other than English. A possible explanation for these findings is that English is prevalent in societies such as Sweden and the Netherlands (Henry & Cliffordson, 2013). Also, Baker and MacIntyre (2000)

Furthermore, there was no gender gap in bilingual- and mainstream education for the variable Ought to Self. Previous findings by for example Azarnoosh and Birjandi (2012) suggest that boys have a tendency to score higher for this construct, however the researchers acknowledge that this variable could be culturally dependent. Gender roles in the Netherlands are less rigid, and therefore it could be

assumed that parents and peers have similar expectations from boys and girls in regard of their L2 learning behavior.

The last variable that variable that need to be discussed in terms of gender differences is L2 *Learning Experience*. This study found that in both educational settings boy students tend to be more motivated when it comes to learning English outside the classroom, however these results are not significant. These observations accord with the findings of Henry (2014) who also concluded that boy students have a greater tendency to assess a naturalistic learning environment as more beneficial for the L2 learning. Also, Mearns and de Graaff (2018) discern that boys from BE and ME are more likely than girls to use English outside the classroom. Similarly, they also did not find a statistically significant difference in motivation for English lesson for the bilingual context, which corroborate with the findings of this study. Unlike their findings, the results of this study revealed that the gender gap is not prevalent in ME. The ME boy students really enjoyed their English lessons and also scored higher for wanting more of them. This could provide support for the argument that when students enjoy their lessons they become more motivated, hence the curriculum can motivate language learners and narrow the gender gap (Kormos & Csizér, 2008).

Lastly, the lack of interactions between Education and Gender align with the observations made by Mearns and de Graaff (2018) and Doiz, Lasagbaster, and Sierra (2014), suggesting that the effect of CLIL on motivation is not dependent on gender roles. Meaning, neither boys or girls from BE revealed opposite motivational behavior in comparison with their counterparts in ME.

5.3. To what extent do motivational differences between t-vmbo and vmbo learners change across year-groups?

Even though the BE students outperform the ME students for every construct, as discussed in Section 5.1., the results of this study also reveal that each year bilingual students have different reasons as to why they are more motivated. The first-year *t-vmbo* students were more motivated in regard of *Ought to Self* and *Future Self*. Again, this supports the statement of Sieben and van Ginderen (2012), who suggested that the family background of BE students affects the motivation of students. The second variable that plays a pivotal role in the motivational behavior of BE students focuses on future opportunities that come along with learning a FL such as English. In fact, each year bilingual students have a more positive attitude toward learning English because of their future aspirations. This support the notion that a CLIL program provides the opportunity to gain practical experiences through internships and exchange programs, in which students are required to use the FL (Coyle, Hood, & Marsh, 2010; Tanner & de Graaff , 2011).

In addition, second-year *t-vmbo* students were more motivated for *Attitude to English, Future Self, Ought to Self, English Lesson*, and *Extramural*. In terms of the first variable, other researchers, such as Baker and MacIntyre (2008), also noted that immersion students have a tendency to have a more positive attitude toward the TL because they integrate with the culture of that language. The second

variable is already discussed in the previous paragraph, however it is noteworthy to also include the students' responses from the open questions. In their second year there is a higher percentage of responses that indicate that they need English for their future. This could be because that at the end of their second-year *vmbo-tl* students are expected to specify their occupational sector by choosing one of the four profiles[14] (Rijksoverheid, 2019a). Yet, this category is mentioned, approximately, twice as much by the students from BE. This is also the case with the classroom experience. Second-year *t-vmbo* students like learning English because they enjoy it more than second-year *vmbo* students. Also, they seem more inclined to use English outside the classroom, just as third-year *t-vmbo* students. This could be because, as already mentioned, the CLIL program provides a different range of activities that are interactive orientated and a naturalistic learning environment (Kormos & Csizér, 2008; Banega, 2013).

These positive attitudes toward the *English Lesson* do alter, however, over the years in BE. The findings of this study reveal that the first-and second-year students' perspective on how English taught in the classroom significantly drops. A similar trend is also occurrent in ME, first-year students assess the English lessons significantly more positive than second-and third-year students. These results were also obtained by Mearns and de Graaff (2018). Also, the findings from the open question reveal that with increasing numbers students from ME and BE find the English lesson more tedious over the years. This concords with findings of prior conducted research (Kormos & Csizér, 2008; Doiz, Lasagabaster & Sierra, 2014b; Mearns, de Graaff, & Coyle, 2017). According to Doiz, Lasagabaster and Sierra (2014b) reasons for this decline can be attributed to the curriculum and repetitious activities. They stated that especially older learners prefer multi-skill activities such as CLIL projects, in which they usually have a considerable amount of freedom in regard of how the students choose to transform the information. However, it should be noted that class observations were not part of this research. Also, the motivational behavior of third-year students is not necessarily caused by being exposed by bilingual education as older learners tend to be less influenced by their experience in the classroom or their teacher (Kormos & Csizér, 2008).

Lastly, this research also found that first-and second-year students are significantly more affected by societal expectations. These findings corroborate with the previous stated notion that older learners are less affected by environmental factors, such as teachers or parents (Kormos and Csizér, 2008). This also supports the idea that bilingual students are not inherently more motivated because they come from a higher socioeconomic background as the findings reveal that parental influence is not occurrent throughout the years. However, a longitudinal study would provide more information about this matter as it would follow the students' motivational behavior throughout the years. An further elaboration on limitations will be provided in Chapter 7.

[14] care and welfare; engineering and technology; business; agriculture.

Chapter 7: Limitations and Recommendations for further Research

While this study supports existing motivation research of CLIL and provides new insights for prevocational education, there are some aspects that future research might want to take into consideration when investigating the motivation of CLIL students at prevocational schools. For example, the obtained data of this study only observes one moment in time while motivation can alter any given moment, especially in the classroom (De Bot, Lowie & Verspoor, 2007). Therefore, it would be interesting to see how the heightened motivational state can be achieved within a (CLIL-)classroom, by the teacher, the curriculum, or through the introduction of a specific type of activity, reinforcing the motivational drive which in turn can be beneficial for language learners (Kormos & Csizér, 2008). Especially, for third-year CLIL students this might be helpful as this study observes an downward trend when it comes to their motivation.

Classroom observations could also provide useful insights on the motivational processes of prevocational students during a CLIL-and a non-CLIL lesson. After the questionnaire was completed at the mainstream school, the examiner stayed and helped the teacher with activities. During this session it already became prevalent that the teacher also first activated the students' prior knowledge, provided multimodal and varied input, and guided their understanding. These are all components of a typical CLIL class (de Graaff, Koopman, & Westhoff, 2007).

Also, there are three aspects that would be of value to consider when using the questionnaire of this study. Firstly, most contemporary research that has been conducted the last couple of years has created a tendency among researchers (e.g. Mearns & de Graaff, 2018) to mistrust the construct Ought-to L2 because it is affected by the family's culture or social background (Azarnooish, & Birjandi, 2012; Sieben & van Ginderen, 2014), and therefore even omitted altogether from questionnaires (Sylvén and Thompson, 2015). This study did find that CLIL students scored signficantly higher in comparison with non-CLIL students, however within this study the students' social background were not taken into consideration or statisically analyzed. Secondly, as this questionnaire has not been used before in other studies, other studies could verify its validity. Lastly, the instrumental aspects (e.g. I can imagine that I need English for the work that I want to do in the future) of the questionnaire could be altered as some students did not know what career path they would choose in the future[15].

Admittedly, the findings of this study should be interpreted with caution as the survey is used for the first time and many other variables, which were not taken into account, can affect the learner's motivation. One major component which should be taken into consideration when future research is conducted are the many various behavioral issues. Many students at prevocational level have behavioral problems which can affect their learning curve and the research.

[15] This was not an issue during the pilot. However, during the actual examination students raised their hands and asked what they should answer if they did not know what kind of job they were aspiring after secondary education.

Chapter 8: Conclusion

The primary objective of this research was to compare the motivational behaviors of prevocational students in two educational settings: bilingual-and mainstream education; and in particular, to compare the gender differences in L2 motivation and across different year groups.

The results were obtained through a questionnaire that was given to two school in the Netherlands: a school that made use of TTO and one that was considered mainstream education. In order to retrieve the data an instrument was developed based on prior research.

Although qualitative and quantitative research was obtained and examined, it was unfortunately not possible to conduct interviews to substantiate the students' answers in the present study.

The findings of this study have revealed that CLIL students are more motivated than students from mainstream education and thereby corroborate with the findings from previous studies (e.g. Mearns & de Graaf, 2017). Also, in terms of gender differences it seems that students at prevocational level seem do not seem to differ as much as the students from higher levels as there are no significant differences between the male and female students (e.g. Henry & Cliffordson (2013). The final research question which addresses the issue of motivational decline seems to be prevalent in both educational contexts in regard of the English classroom, which was also confirmed by research of Mearns, de Graaff, Coyle (2017).

All in all, there are many factors that affect the motivational behavior of prevocational students. This study is an attempt to shine more light on the students of prevocational secondary education; in particular, to investigate the L2 motivation in different educational settings. Further research would be required to make affirmative assertions about the motivational behavior of the aforementioned target group.

Appendices

Appendix A: CLIL Connect Conference

VUB VRIJE UNIVERSITEIT BRUSSEL

ATTEST VAN DEELNAME

Toegekend aan: **Pamela Koert**

Als bewijs van deelname aan de CLIL Connect Conference 2019.
Meertalig onderwijs in Nederland en Vlaanderen :

Donderdag 14 en vrijdag 15 februari 2019
Vrije Universiteit Brussel
Campus Etterbeek
Pleinlaan 2
1050 Etterbeek

Dit attest werd afgeleverd te Brussel op vrijdag 15 februari 2019.

Prof. dr. Nadine ENGELS,
Voorzitter Interfacultair Departement LerarenOpleiding (IDLO)

SCIENTIA VINCERE TENEBRAS VRIJE UNIVERSITEIT BRUSSEL 1834

Pleinlaan 2 ▾ 1050 Brussel ▾ Tel. +32 (0)2 629 21 11 ▾ BTW BE 0449 012 406 ▾ www.vub.ac.be

Appendix B: Consent form

rijksuniversiteit groningen

Groningen, 24 mei 2019

Beste ouders/verzorgers,

Ik ben Pamela Koert en studeer Toegepaste Taalwetenschappen aan de Rijksuniversiteit Groningen. In het kader van mijn afstudeerscriptie doe ik onderzoek naar het onderwijs en het leren van Engels als een tweede taal. Hiervoor wil ik graag een vragenlijst en interviews afnemen in de klas van uw kind.

Hierbij wil ik uw toestemming hiervoor vragen om uw kind te laten deelnemen aan mijn onderzoek.

De vragenlijst gaat over hoe leerlingen aankijken tegen het leren van Engels als tweede taal. Het invullen van de vragenlijst zal ongeveer 10 minuten duren. Met sommige leerlingen wil ik ook graag interviews doen. Daarbij ga ik wat dieper in op de vragen die ze bij de vragenlijst hebben ingevuld. Interviews duren ongeveer 15 minuten en zullen worden opgenomen met een audiorecorder.

Naast uw toestemming is het ook belangrijk dat uw kind mee wil doen aan dit onderzoek. Alleen leerlingen waarvan zowel de ouder als zij zelf toestemming hebben gegeven, doen mee aan het onderzoek. Uw kind kan op elk moment (ook halverwege de vragenlijst of het interview) zonder reden aangeven dat het wil stoppen - en dan doen we dat ook.

Persoonsgegevens zoals de naam van uw kind worden anoniem gehouden en na afronding van dit onderzoek vernietigd. Hetzelfde geldt voor de geluidsopnames. Voor wetenschappelijke doeleinden worden alleen geanonimiseerde gegevens verwerkt. Mocht u vragen hebben over dit onderzoek, dan kunt u contact opnemen via de mail (p.c.koert@student.rug.nl) of bellen (050 5253571). Ook kunt u contact opnemen met onze scriptiebegeleider Dr. Marije Michel van de Rijksuniversiteit Groningen: m.c.michel@rug.nl.

Alvast hartelijk bedankt voor uw medewerking en dat van uw kind!

Met vriendelijke groet,

Pamela Koert

TOESTEMMINGSVERKLARING

De ouder(s) / verzorger(s) van

Naam kind: …….

Klas: …….

geven hierbij toestemming voor deelname aan het onderzoek van de Rijkuniversiteit Groningen (Koert/Michel). Mijn kind mag (graag aanvinken waarvoor u toestemming verleent)

□ **wel** □ **niet** de *vragenlijst* invullen.

□ **wel** □ **niet** aan het *interview* deelnemen.

Naam ouder/verzorger: …….

Datum: …….

Handtekening: …….

Appendix C: Questionnaire for students.

Vragenlijst: Jouw Mening Over Engels!

Naam leerling: .....

Deze vragenlijst gaat over jouw mening over het leren van Engels. Door het invullen van deze vragenlijst help je mij mee aan een taalonderzoek. Daarom wil ik je alvast heel erg bedanken voor je tijd en inzet!

Deze vragenlijst vraagt naar jouw mening. Er zijn geen goede of foute antwoorden en ik zal de antwoorden anoniem verwerken.

Deel 1:

In dit deel geef je jouw mening op een stelling door aan te geven of je het ergens mee eens of oneens bent. Zet een kruisje in het vakje dat voor jou van toepassing is. Vul bij elke stelling **één** antwoord in. Mocht je twijfelen, kies dan het antwoord wat het meest aansluit bij jouw mening. Alvast heel erg bedankt voor je inzet!

Voorbeeld:

Als je bijvoorbeeld héél erg van pizza houdt, zet dan een kruisje bij ‘sterk mee eens’ :

Ik vind pizza lekker.

- [x] Sterk mee eens
- [ ] Eens
- [ ] Neutraal
- [ ] Oneens
- [ ] Sterk mee oneens

Good Luck!

---

1 Ik vind Engels belangrijk.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

2 Ik heb Engels nodig voor mijn opleiding na de middelbare school.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

3 Mijn ouders vinden het belangrijk dat ik goed voor Engels leer.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

4 Ik moet Engels leren want anders denk ik dat ik niet succesvol kan zijn in mijn toekomstige baan.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

5 Ik gebruik Engels voor social media (Facebook/Instagram/Snapchat).

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

6 Ik vind het vak Engels handig.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

7 Ik vind het moeilijk om talen te leren.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

8 Als ik aan mijn toekomstige baan denk, kan ik me voorstellen dat ik daar Engels voor gebruik.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

9 Ik moet Engels leren omdat ik geen slechte cijfers wil halen.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

10 Ik vind het leren van Engels leuk.

- ○ Sterk mee eens
- ○ Eens
- ○ Neutraal
- ○ Oneens
- ○ Sterk mee oneens

11 Ik vind het handig om talen te leren.

- ○ Sterk mee eens
- ○ Eens
- ○ Neutraal
- ○ Oneens
- ○ Sterk mee oneens

12 Ik kan me voorstellen dat ik in de toekomst in het buitenland woon en daar Engels gebruik om met andere mensen te praten.

- ○ Sterk mee eens
- ○ Eens
- ○ Neutraal
- ○ Oneens
- ○ Sterk mee oneens

13 Mijn ouders gaan ervan uit dat als ik Engels leer veel zal bereiken.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

14 Ik vind het vak Engels interessant.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

15 Ik kan me voorstellen dat ik in de toekomst Engels spreek met vrienden of collega's.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

16 Ik moet goed mijn best doen voor Engels omdat mijn ouders dat belangrijk vinden.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

17 Mijn docent Engels zorgt ervoor dat Engels leren leuk is.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

18 Thuis kijk ik TV in het Engels.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

19 Talen leren is leuk.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

20 Mijn ouders zeggen dat Engels belangrijk is voor mijn toekomst.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

21 Ik vind het interessant om het vak Engels te leren.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

22 Mijn docent Engels zorgt voor afwisseling tijdens de les.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

23 Ik vind talen saai.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

24 Mijn docent Engels denkt dat ik hard werk voor dit vak.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

25 Ik kan me voorstellen dat ik Engels nodig heb om later een goede baan te krijgen.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

26 Buiten de les probeer ik ook Engels te gebruiken.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

27 Ik vind het belangrijk om talen te leren.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

28 Ik kijk films in het Engels met Engelse ondertiteling.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

29 Ik kijk films in het Engels zonder ondertiteling.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee onees

30 Ik leer veel tijdens de Engelse les.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

31 Ik vind het interessant om Engels te leren.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

32 Het is handig om kennis te hebben over Engels.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

33 Ik wil graag kunnen communiceren met mensen die Engels spreken.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

34 Mijn docent Engels lijkt veel plezier te hebben tijdens het lesgeven.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

35 Ik heb Engels nodig voor mijn toekomst.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

36 De mensen in mijn omgeving vinden Engels een belangrijke taal.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

37 Ik kan me voorstellen dat ik Engels nodig heb voor het werk dat ik later wil doen.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

38 Ik game in het Engels (bijvoorbeeld: Fortnite, Krunker).

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

39 Het is belangrijk om de Engelse taal te beheersen.

- Sterk mee eens
- Eens
- Neutraal
- Oneens
- Sterk mee oneens

40 Ik zou het leuk vinden om vaker Engelse les te krijgen.

- ○ Sterk mee eens
- ○ Eens
- ○ Neutraal
- ○ Oneens
- ○ Sterk mee oneens

Deel 2: Je bent bijna klaar! Deze laatste vragen gaan over jou en jouw school.

Wat is je leeftijd?

Ik ben ……jaar.

Ben je een jongen of een meisje?

- ○ Jongen
- ○ Meisje
- ○ Anders, namelijk

……

…….....

Welke taal/talen spreek je het meest thuis? Als je een taal/talen behalve Nederlands noemt, geef dan aan waarom je deze taal/talen gebruikt.

- ○ Nederlands
- ○ Ook een andere taal/talen, namelijk:

_____

_____

In welke klas zit je?

- ○ 1e klas
- ○ 2e klas
- ○ 3e klas

Vind je het leuk om Engels te leren?

- ○ Ja, omdat:

_____

_____

_____

_____

- ○ Nee, omdat:

_____

_____

_____

_____

Heb je alles ingevuld ? Dan ben je klaar!

Heel erg bedankt voor je inzet!

Appendix D: The English version of the questionnaire.

Factors for Liker scale items with Cronbach's alpha reliability scores (á).

Construct	**Items**	***á***
1. Attitude to English (6 items)	- It is useful to have knowledge of the English language. (32) - It is important to master the English language. (39) - I find it interesting to learn English. (31) - I want to be able to communicate with people who speak English. (33) - I think the English language is important. (1) - I enjoy learning the English language. (10)	.92
2. Attitude to Foreign Languages (5 items)	- I find languages boring. (23) * - I find languages useful. (11) - I find languages important. (27) - Learning languages is fun. (19) - I find languages difficult. (7) **	.64
3. Future L2 Self (7 items)	- I imagine myself needing English to get a good job later. (25) - I imagine myself speaking English with friends or colleagues in the future. (15) - I can imagine myself living abroad and using English for communication with other people. (12) - I need English for my future. (35) - Whenever I think of my future career, I imagine myself using English. (8) - I can imagine that I need English for my education after high school. (2)	.94

	- I can imagine that I need English for the work that I want to do later. (37)	
4. Ought-to L2 Self (7 items)	- My parents say that English is important for my future. (20) - I need to do well in English because my parents find it important. (16) - My parents assume that if I learn English I will achieve a lot. (13) - My parents find it important that I learn English well. (3) - The people in my inner circle find the English language important. (36) - Studying English is important because otherwise I don't think I can be successful at my future job. (4) - I have to study English because I don't want to get bad grades. (9)	.83
5. English Lesson (9 items)	- I learn a lot during my English lessons. (30) - My English teacher provides variety during class. (22) - My English teacher thinks I work hard for English. (24) - My English teacher seems to enjoy teaching English. (34) - I find the English course interesting. (14) - I would like to have more English lessons each week. (40) - I find the English lessons useful. (6) - My English teacher makes learning English fun. (17) - I find it interesting to learn English. (21)	.87
6. Extramural (6 items)	- At home I watch TV in English. (18) - I play games in English (Fortnite, Krunker). (38) - I use English for social media (Facebook / Instagram / Snapchat). (5)	.82

	- Outside of class I also try to use English. (26) - I watch movies in English without subtitles. (29) - I watch films in English with English subtitles. (28)	

*Negatively worded items were recoded before being included in the scale.

** This question was part of the main study, however the answers for this question were deleted.

Appendix E: The Dutch version of the questionnaire.

Category/Factor	**Items**	**ά**
1. Attitude to English (6 items)	1. Het is handig om kennis te hebben over Engels. (32) 2. Het is belangrijk om de Engelse taal te beheersen. (39) 3. Ik vind het interessant om Engels te leren. (31) 4. Ik wil graag kunnen communiceren met mensen die Engels spreken. (33) 5. Ik vind Engels belangrijk. (1) 6. Ik vind het leren van Engels leuk. (10)	.92
2. Attitude to Foreign Languages (5 items)	1. Ik vind talen saai. (23)* 2. Ik vind het handig om talen te leren. (11) 3. Ik vind het belangrijk om talen te leren. (27) 4. Talen leren is leuk. (19) 5. Ik vind het moeilijk om talen te leren. (7)*	.64
3. Future L2 Self (7 items)	1. Ik kan me voorstellen dat ik Engels nodig heb om later een goede baan te krijgen. (25) 2. Ik kan me voorstellen dat ik in de toekomst Engels spreek met vrienden of collega's. (15) 3. Ik kan me voorstellen dat ik in de toekomst in het buitenland woon en daar Engels gebruik (12) 4. Ik heb Engels nodig voor mijn toekomst. (35) 5. Als ik aan mijn toekomstige baan denk, kan ik me voorstellen dat ik daar Engels voor gebruik. (8) 6. Ik heb Engels nodig voor mijn opleiding na de middelbare school. (2) 7. Ik kan me voorstellen dat ik Engels nodig heb voor het werk dat ik later wil doen. (37)	.94
4. Ought-to L2 Self (7 items)	1. Mijn ouders zeggen dat Engels belangrijk is voor mijn toekomst. (20)	.83

	2. Ik moet goed mijn best doen voor Engels omdat mijn ouders dat belangrijk vinden. (16) 3. Mijn ouders gaan ervan uit dat als ik Engels leer veel zal bereiken. (13) 4. Mijn ouders vinden het belangrijk dat ik goed voor Engels leer. (3) 5. De mensen in mijn omgeving vinden Engels een belangrijke taal. (36) 6. Ik moet Engels leren want anders denk ik dat ik niet succesvol kan zijn in mijn toekomstige baan. (4) 7. Ik moet Engels leren omdat ik geen slechte cijfers wil halen. (9)	
5. English Lesson (9 items)	1. Ik leer veel tijdens de Engelse les. (30) 2. Mijn docent Engels zorgt voor afwisseling tijdens de les. (22) 3. Mijn docent Engels denkt dat ik hard werk voor dit vak. (24) 4. Mijn docent Engels lijkt veel plezier te hebben tijdens het lesgeven. (34) 5. Ik vind het vak Engels interessant. (14) 6. Ik zou het leuk vinden om vaker Engelse les te krijgen. (40) 7. Ik vind het vak Engels handig. (6) 8. Mijn docent Engels zorgt ervoor dat Engels leren leuk is. (17) 9. Ik vind het interessant om het vak Engels te leren. (21)	.87
6. Extramural (6 items)	1. Thuis kijk ik TV in het Engels. (18) 2. Ik game in het Engels (Fortnite, Krunker). (38) 3. Ik gebruik Engels voor social media (Facebook/Instagram/Snapchat). (5) 4. Buiten de les probeer ik ook Engels te gebruiken. (26) 5. Ik kijk films in het Engels zonder ondertiteling. (29) 6. Ik kijk films in het Engels met Engelse ondertiteling. (28)	.82

*Negatively worded items were recoded before being included in the scale.

** This question was part of the main study, however the answers for this question were deleted.

Appendix F: Categorical overview of the students' attitudes.

Categories for positive attitudes	**Examples** "I like learning English because…"	**Dutch translations** "Ik vind het leuk om Engels te leren omdat…"	**Categories negative attitudes**	**Examples** "I do not like learning English because…"	**Dutch Translations** "Ik vind het niet leuk om Engels te leren omdat.."
Communication	"…I can talk to people from other countries".	"…ik dan met mensen kan praten die uit andere landen komen".	Boring	"…it is boring"	"…het is saai".
Future	"…knowing English increases my chances of getting a good job".	"…ik dan een betere kans heb om en goeie baan te krijgen".	Not challenged	"…I already know everything"	"…ik weet alles al".
Enjoyment	"…it is fun to learn English".	"…ik het leuk vind".	Takes time	"…it takes a lot of time".	"…het veel tijd kost".
World language	"…English is an important language".	"…Engels is een belangrijke taal".	Work load	"…it is a lot of work"	"…het veel moeite kost".
Learning	"…I want to improve my English spelling".	"…ik graag mijn Engelse spelling wil verbeteren".	Dislike	"…it is stupid"	"…het stom is"
Movies &Video's	"…I like to watch English video's".	"…ik kijk graag naar Engelse video's".	Teacher	"…I do not understand the teacher's explanations".	"…ik de uitleg van de leraar niet snap".
Social Media	"…I use English on social media".	"…ik Engels gebruik op social media".			

Gaming	"…it is useful for the online games I play".	"…het handig voor online gaming".			
Easy	"…it is an easy language to study".	"…het makkelijk is".			
Challenge	"…it is a challenge for me".	"…ik het een uitdaging vind".			
Teacher	"…the teacher is fun"	"…de leraar leuk is".			

References

Azarnoosh, M., & Birjandi, P. (2012) Junior high school students' L2 motivational self system: Any gender differences?. *World Applied Sciences Journal, 20*(4), 577-584.

Banegas, D., L., (2013) The Integration of Content and Language as a driving Force in the EFL Lesson International Perspectives on Motivation: Language learning and professional challenges. (eds. Ushioda, E.). London, UK: Palgrave Macmillan. pp. 82-97.

Baker, S.C., & McIntyre, P. D. (2000). The role of gender and immersion in communication and second language orientations. *Language Learning, 5* (2), 311-341.

CBS. (2019). Leerlingen, deelnemers en students; onderwijssoort, woonregio. Retrieved from: https://opendata-cbs-nl.proxyub.rug.nl/statline/#/CBS/nl/dataset/71450ned/table?fromstatweb

Council of Europe. (2001). *Common European Framework of Reference for Languages: Learning, teaching, assessment*. Cambridge: Cambridge University Press

Coyle, D. (2007). Content and Language Integrated Learning: Towards a connected research agenda for CLIL pedagogies. *International Journal of Bilingual Education and Bilingualism*. *10*(5), 543-562.

Coyle, D., Hood, P., & Marsh, D. (2013). *CLIL: Content and language Integrated Learning. Cambridge*, UK: Cambridge UP.

Cummins, J. (1998). Immersion education for the millennium: What have we learned from 30 years of research on second language immersion?. In M.R. Chils amd R.M. Bostwick (eds.). *Learning through Two languages: Research and Practice, Second Katoh Gakuen Interional Symposium on Immersion and Bilingual Education*, 34-47. Japan: Katoh Gakuen.

De Bot, K., Lowie, W., & Verspoor, M. (2007). A Dynamic Systems Theory approach to second language acquisition. *Bilingualism: Language and Cognition, 10*(1), 7-21.

De Graaff, R., Koopman, GJ, Anikina, Y. & Westhoff, G. (2007) An observation tool for

effective L2 pedagogy in content and language integrated learning (CLIL), *International Journal of Bilingual Education and Bilingualism*, *10*(5), 603-624.

Denman, J., Tanner, R., & de Graaff, R. (2013). CLIL in junior vocational secondary education: challenges and opportunities for teaching and learning. *International Journal of Bilingual Education and Bilingualism. 16*(3), 285-300.

Doiz, A., Lasagbaster, D., & Sierra, J. M. (2014a). CLIL and motivation: The effect of individual and contextual variables. *The Language Learning Journal*, *42*(2), 209–224.

Doiz, A., Lasagbaster, D., & Sierra, J. M. (2014b). Giving voice to the students. Motivation and Foreign Language Learning: From theory to practice. In Lasagabaster, D., Doiz, A.,Sierra, J.M. (Eds.), *Language Learning and Language Teaching, 40*, 117-138. Amsterdam: John Benjamins PC.

Dörnyei, Z. (2001*). Motivational strategies in the language classroom*. Cambridge: Cambridge University Press.

Dörnyei, Z., & Ushioda, E. (2011). *Teaching and researching: Motivation*. Harlow: Pearson Education.

Elzenga, A., & de Graaff, R. Motivatie voor Engels en Frans in het tweetalig onderwijs: Zijn leerlingen in het tweetalig onderwijs gemotiveerdere taalleerders?. *Levende Talen Tijdschrif, 16*(4), 16-26.

Field, A., Miles, J., Field, Z. (2012). *Discovering statistics using R*. London: Sage.

Gardner, R.C, & Lambert, W. (1959). Variables in Second Language Acquisition. *Canadian Journal of Psychology*, *13*(4), 266 – 272.

Gardner, R.C, & Lambert, W. (1985). *Social psychology and second language learning: The role of attitudes and motivation.* Baltimore: Edward Arnold.

Genesee, F. (2007). French immersion and at-risk students: A review of research evidence. *The Canadian Modern Language Review*, *63*(5), 655-688.

Henry, A.. & Cliffordson, C. (2013). Motivation, gender, and possible selves. *Language Learning: A journal of Research in Language Studies*, *63*(2), 271-295.

Henry, A. (2014). Swedish students' beliefs about learning English in and outside of school. In Lasagabaster, D., Doiz, A.,Sierra, J.M. (Eds.), Language *Learning and Language Teaching*,

40, 93-116. Amsterdam: John Benjamins PC.

Heras, A., & Lasagabaster, D. (2014). The impact of CLIL on affective factors and vocabulary learning. *Language Teaching Research*, *19*(1), 70–88.

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*, 319–340.

Iwaniec, J. (2019). Language learning motivation and gender: The case of Poland. *International Journal of Applied Linguistics*, *29*(1), 130-143.

Kormos, J. & Csizér, K. (2008). Age-related differences in the motivation of learning English as a foreign language: Attitudes, selves, and motivated learning behavior. *Language Learning, 58*(2), 327-355.

Lasagbaster, D. (2008). Foreign Language Competence in Content and Language Integrated Courses. *The Open Applied Linguistics Journal, 1*, 30-41.

Llinares, A., Morton, T., & Whittaker, R. (2012). The roles of language in CLIL. New York, NY: Cambridge UP

MacIntyre, P.D., Baker, S.C., Clément, R., R., & Donovan, L. A. (2003). Sex and age effects on willingness to communicate, anxiety, perceived competence, and L2 motivation among junior high school French immersion students. *Language Learning, 53*(1), 137-166.

Markus, H. R., & Nurius, P. (1986). Possible selves American Psychologist 41(9), 954-969 31(3), 117–135.

Mearns, T., De Graaff, R., & Coyle, D. (2017) Motivation for or from bilingual education? A comparative study of learner views in the Netherlands. *International Journal of Bilingual Education and Bilingualism*, 1-14.

Mearns, T., &, De Graaff, R. (2018). Bucking the trend?: Motivational differences between boys and girls who opt in or out of bilingual education. *Journal of Immersion and Content-Based Language Education, 6*(1), 1–26.

Mearns, T. & de Jong, N. (in preparation). *Waarom leer jij Engels op het TTO.* Paper presented at the CLIL2019 Conference, Brussel, Belgium, 14-15 February (Retrieved by e-mail from the

original author).

Ministerie van het Onderwijs, Cultuur en Wetenschap. (2019). Inspectie van het onderwijs: De staat van het onderwijs 2019. [Education assessment: The current state of education in 2019]. Retrieved from https://www.onderwijsinspectie.nl/documenten/rapporten/2019/04/10/rapport-de-staat-van-het-onderwijs-2019

Nuffic. (2019a). Alle tto-scholen in Nederland. [All bilinguals schools in the Netherlands]. Accessed on 9 March 2019. Retrieved from: https://www.nuffic.nl/onderwerpen/alle-tto-scholen-in-nederland/

Nuffic. (2019b). Certificering tto-scholen. [TTO-schools' certification]. Retrieved from https://www.nuffic.nl/onderwerpen/certificering-tto-scholen/

Onderwijs in Cijfers. (2016). Leerlingenaantallen voortgezet onderwijs. [Number of students in secondary education]. *Dienst Uitvoering Onderwijs.* Retrieved from https://www.onderwijsincijfers.nl/kengetallen/vo/leerlingen-vo/aantallen-leerlingen-in-het-vo

Rijksoverheid. (2019a). Hoe zit het vmbo in elkaar? [Structure of Preparatory secondary vocational education]. Retrieved from https://www.rijksoverheid.nl/onderwerpen/voortgezet-onderwijs/vraag-en-antwoord/hoe-zit-het-vmbo-in-elkaar.

Rijksoverheid. (2019b). Keuzemogelijkheden verplichte eindtoets basisschool [Compulsory final examination in primary education]. Retrieved from https://www.rijksoverheid.nl/onderwerpen/schooladvies-en-eindtoets-basisschool/keuzemogelijkheden-verplichte-eindtoets-basisschool.

RStudio. (2019). RStudio: Integrated development environment for R (Version 3.5.3). Windows. Boston, MA: RStudio. Retrieved from http://www.rstudio.org/

Sieben, I., & van Ginderen, N. (2014). De keuze voor tweetalig onderwijs. *Mens en maatschappij*, *89*(3), 233–255.

Stevens, G., van Dorsselaer, S., Boer, M., de Roos, S., Duinhof, E., ter Bogt, T., van den Eijnden, R., Kuyper, L., Visser D., Vollebergh, W., & de Looze, M. (2018). Gezondheid, welzijn en

opvoeding van jongeren in Nederland [pdf file]. [Health, well-being and upbringing of youth in the Netherlands] In HBSCE 2017. Retrieved from https://www.trimbos.nl/docs/5f309cd4-dcfe-4a92-a559-85720372d69f.pdf. Utrecht, The Netherlands: Netherlands Institute of Mental Health and Addiction

Sylvén, L. K., & Thompson, A. S. (2015). Language learning motivation and CLIL: Is there a connection? *Journal of Immersion and Content-Based Language Education*, *3*(1), 28–50.

Tanner, R., & Graaff, R. de (2011*). Proud to be t-vmbo; teachers' and students' opinions about good practice in bilingual junior secondary vocational education (tweetalig vmbo)*. KLO-rapport. Utrecht: Universiteit Utrecht, Centrum voor Onderwijs en Leren.

Qualtrics. (2019). Qualtrics: Survey design software (Version 19.2019). Windows. Provo Utah, USA: Qualtrics. Retrieved from: https://www.qualtrics.com

Colofon

Auteur:	Pamela Koert
Titel:	Students' Motivation in Pre-vocational Secondary Education: A Comparative Study of Mainstream and Bilingual Schools in the Netherlands.
Een uitgave van:	Wetenschapswinkel Taal, Cultuur & Communicatie Rijksuniversiteit Groningen
Begeleiding:	Dr. Marije Michel
In opdracht van:	Stad & Esch College Meppel
Verkoopprijs:	€12,50
Uitgave:	April 2020

Contact

Wetenschapswinkel Taal, Cultuur & Communicatie
Postbus 716
9700 AS Groningen
tawi@rug.nl
@ScienceShopsRug

Nederlandse samenvatting

Deze studie is uitgevoerd om de verschillen in motivatie tussen studenten van een regulier vmbo en een tweetalig onderwijs (tto) te onderzoeken. In Nederland gaan de meeste studenten na het basisonderwijs naar het vmbo. Deze groep staat voor veel uitdagingen, omdat ze vaker gedragsproblemen vertonen en minder gemotiveerd zijn dan studenten van andere middelbare schoolopleidingen. Uit onderzoek is gebleken dat de tweetalige onderwijsaanpak *Content and Language Integrated Learning* (CLIL) veel voordelen heeft, waaronder een betere motivatie onder studenten. Toch is onderzoek naar tweetalig vmbo-onderwijs schaars. Deze studie onderzoekt de verschillen in motivatie tussen bovengenoemde educatieve contexten, zowel op gebied van gedrag als op gebied van gender. De resultaten laten zien dat leerlingen uit het tweetalig onderwijs significant gemotiveerder waren dan leerlingen uit het gewoon onderwijs. Jongens uit het tweetalig onderwijs waren ook gemotiveerder dan jongens uit het gewoon onderwijs, met uitzondering van hun houding tegenover vreemde talen. Ook meisjes uit het tto presteerden beter dan hun leeftijdsgenoten in het reguliere onderwijs. Er werd echter geen significant verschil gevonden in de invloed van maatschappelijke verwachtingen op motiverend gedrag, noch in de natuurlijke leeromgeving. Er is ook geen genderkloof gevonden in beide onderwijsomgevingen, met één uitzondering wat betreft de houding ten opzichte van vreemde talen. Meisjes uit het tweetalig onderwijs staan significant positiever tegenover vreemde talen dan de jongens in deze educatieve setting. Ten slotte leggen tweetalige studenten meer de nadruk op het leren van Engels als vreemde taal omdat ze het nodig hebben voor hun toekomst. Beide groepen laten ook zien dat ze naarmate ze ouder worden minder waarde hechten aan hun formele leeromgeving.